THE

MEDICAL AND SURGICAL REPORTER.

No. 1465.] PHILADELPHIA, MARCH 28, 1885. [Vol. LII.—No. 13.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

HYGIENIC AND THERAPEUTIC VALUE OF ENFORCED RESPIRATION.

BY T. CURTIS SMITH, M. D.,

Of Aurora, Ind.

It is impossible for man to live without respiration. The number of respirations normally is about eighteen per minute. Any condition that causes the number to fall far below or to reach far above this is, as a rule, seriously pathological, and must of necessity be corrected if life is to be long maintained.

A mere glance at these facts will very clearly teach us the importance of correct and perfectly normal respiration. If I should say that very many healthy people do not use all their lungs for respiration, and that this is so habitually, some of you may be surprised. Yet this is very true, and especially so with men of sedentary habits—students and women. Some of these may be "too lazy to breathe," yet not fully conscious of it. It may be better to say they are "too careless to breathe," or have never considered its full importance. Dr. J. H. Tyndall (Treatment of Consumption, p. 85), has well said: "The importance of knowing how to breathe cannot be over-estimated. No line of treatment (of lung diseases) at home or by change of climate should be inaugurated without thorough instruction in lung gymnastics, in the mechanism of breathing. Until you have paid close attention to the subject for a number of years, you will never know how many human beings do not know how to breathe, and through which organ to breathe. Respiration, this most important of all functions of life, is by some carried on superficially; by others pervertedly, and contrary to physiological requirements."

"Breathing is a function which should be exercised slowly and profoundly; a requirement which can only be fulfilled by breathing through the nose. Breathing through the mouth leads to superficial and often rapid breathing; still oftener to snapping off the air."

We are often called on to prescribe for patients or give advice for relief of those who are of sedentary habits, as book-keepers, clerks, women, or students, who will complain of pain in the upper half of the chest, or of at least a very uncomfortable feeling of depression in the breast or lungs. These patients often express a fear of organic lung trouble, and that consumption is threatening them. In such cases we will very often note a languid expression or a semi-melancholic appearance. It is also not at all uncommon to note a sallowness of skin, a feeling of inability for any considerable manual effort, dyspnœa when the effort is made, or that the patient becomes quickly exhausted, is constipated, has hebetude of mind, and very little disposition to do more than absolute duty demands.

If now we thoroughly explore the chest, we do not find any revelation of actual lung disease, yet we are quite sure to note the presence of very feeble respiration all over both lungs. We may also find seeming or real emphysema, due to changes resulting from sub-acute inflammation or hypostatic stasis in a circumscribed section of lung tissue, or over a considerable area of one or both lungs. Dr. Carl Seiler has taught that

such a condition may result from a partial or complete disuse of a portion of the lung, that this condition is most apt to be connected with bronchial catarrh, especially of the chronic form of it, or from circumscribed pneumonia, a lobular pneumonia, tubercular deposits, and in lungs otherwise healthy by long-continued partial or entire disuse of portions of the lung.

These conditions often lead to destruction of the cell walls by their breaking down. The debris of detached epithelium will undergo decomposition, the cell-wall becomes thin and finally destroyed, and several air-cells are thrown into one, or if from inflammation, they may become solidified so that air may not enter into them. Such cavities are small but real, and such solidified portions may for a time seem harmless, but will tell on the patient's vital capacity very materially in time, and will form small sections that invite lobular pneumonia or tuberculosis, whenever occasion or opportunity may offer.

Most of the cases coming under my notice who complained of the pain, aching or soreness in the breast, some dyspnœa on moderate exertion, etc., have been those of sedentary habits, as students, tailors, book-keepers, teachers, or women whose work keeps them sitting or bending over it, or those whose employment does not require any considerable manual effort. Often the pain in the breast will only be muscular, and need nothing more than a good warm application or friction to relieve it.

Physical exploration will reveal the fact that there is feeble respiration, and if the patient is asked to take a full, deep breath, he will heave his shoulders up, draw in his abdominal muscles, and draw hard to get a deep respiration, but scarcely, if at all, succeeds in getting more air than usual into his lungs. The fact is, he has not taken a deep, full respiration for so long, that much of the lung tissue has lost its resilient elasticity, and muscles concerned in respiration have never known or have lost their full power of exercise.

It is with these muscles as with others. One may not use the arm for a long period of time, and then when he tries it he is quite surprised at the weakness of that arm. Extra use of it develops also great power in that same arm. It is just so with the lung tissue and with the muscles of respiration. Their long partial disuse weakens and renders them incapable of performing their full function in the matter of healthy respiration.

There is another feature of these cases worthy of note. They are nearly always constipated. This condition is not altogether due to insufficient physical exertion, but is in part due to incomplete or partial respiration. Since Prof. Graham pointed out how the respiratory movements of the muscles promote the peristaltic movements of the intestines, we have been able to see more clearly the relation existing between the functions of the muscles that supply the respiratory strength, the abdominal muscles, and the movements of the intestines themselves. If the respiratory muscles perform their duties but partially and but feebly, we can see that this failure, added to insufficient physical exercise, becomes a strong factor in the etiology of constipation, as well as other functions of the abdominal organs. The impaired functions of these organs will lead to lassitude, melancholic despondency, so-called liver complaint, imperfect assimilation of food, and the host of collateral derangements growing out of these complaints, all more or less traceable, directly or indirectly, to long-continued imperfect respiration.

No one need be told how the blood becomes imperfectly oxygenized by this same source of evil, nor need to be told of its consequences. Even the laity know much about this. Add to this imperfect breathing the confinement for many hours daily to a room where ventilation is very defective, and you can readily see how the general system will soon suffer, and the nervous and respiratory systems in particular.

If now, a person affected as before described is taught how to take full, deep, long inspirations and forced expirations, he may soon rid himself of the pain or soreness of his chest-walls and of the lungs themselves. Complete expirations are quite as necessary as long full inspirations. For instance, every time we breathe we take in about 320 cubic centimetres. We also expel about the same quantity at every expiration. But we do not expel always the same air that is taken in at each inspiration. The residual air is therefore very considerable, and this of necessity becomes more loaded with carbonic acid gas than does the air that is immediately expelled.

Now, in imperfect respiration the residual air is more slowly changed than it should be, and if there is partial or complete atalectasis of some portion of the lung, where the air may remain long shut off from the free exchange that ought to go on in respiration, we can readily see that serious consequences may result from this condition. We can further see that this partial or complete atalectasis may occur from imperfect respiration, and especially if there is or has been present lob-

ular pneumonia or chronic bronchitis. If in this condition, the residual air remains long in the air cells, they being more or less completely shut up from the currents of air that sweep in and out of the lungs. Then we see that this air becomes poisonous. The epithelium of the air cells decomposes, the cell walls give away, several cells or many cells are turned into one, and still the emphysemic condition continues, and the poisoned air remains shut up, to do all the mischief in its power to the lung tissue.

But even where it is not thus shut off from the respiratory currents, but for want of complete expiration remains too long in the lungs, the excess of the poisonous gases it becomes charged with cannot do other than mischievous work, which in a subject predisposed to tuberculosis invites the full development of that fatal malady.

But in such cases I believe we have, in forced respiration, a valuable means with which to accomplish complete relief, or to at least assist in reaching such a desirable end. Let a patient who comes with soreness of breast or lungs, a little cough, dyspnœa on exercise, lassitude, easily exhausted, rapid pulse on slight exertion, constipation, mental hebetude, etc., commence at once these forced inspirations and expirations, and practice this for ten to fifteen minutes from four to six times every day, and with proper measures otherwise he will soon feel like a new man. He will need very little medicine, often only a placebo, and will need mostly hygienic management as to diet, hours of work, exercise, sleep, etc.

Tyndall says (*loc. cit.*), "Lung gymnastics proper should be carried on in the open air, while at work if possible, or while walking or standing still, or in a well-ventilated room. The exact limits to which actual gymnastics should be carried on at home, or in a gymnasium, often tax the best judgment of the physician. Nearly all * * * * performances require more or less severe straining of the pectoral muscles, and sudden calls upon the heart for increased action."

"While walking, the patient should as frequently as possible (say every ten or fifteen minutes) take deep inspirations and expirations without straining, from six to eight times in succession; which act completely empties and refills the lungs."

How is this best done? Certainly not through the open mouth, but through the nose. Formerly, I was in the habit of directing my patients to breath through a common quill placed between the lips, both for inspiration and expiration; but a little consideration leads to the better plan of breathing slowly through the nose, unless there is so much obstructive nasal catarrh as to prevent this method.

"The air (Wagner, quoted by Tyndall,) in its passage through the tortuous channels of the nose, is raised to the temperature of the body before it reaches the larynx; this can easily be demonstrated. On a cold day let one breathe through his mouth in the open air, the sensation of cold will at once be felt as far down at least as the larynx, and an irritating cough (possibly) be induced. No matter how low the temperature may be, the sense of cold is never experienced below the border of the soft palate, so long as breathing is carried on through the nose with closed mouth."

"Let me remind you again that the function of the lung is a passive one, and the result of the combined labors of the other organs, and you will have an idea of how a neglect of this performance may lead, not to local disturbances only, but to disturbances affecting the whole organism. This, because the introduction of oxygen for burning purposes and the exhalation of carbonic acid, representing in part the effete products—this introduction of air is not 'food for the lungs,' but for the whole organism at large." This we all know to be true, and, therefore, the more completely the respiration is carried on, the better the functions of other organs are carried on also.

How often it was noted during the late war that men went from the store, factory, shop, counting-room, and school-room, with all the symptoms we have named, and many of them aggravated cases, and were soon entirely relieved of all trouble of this kind.

All of us have ordered men to leave their sedentary habits or employments and go to out-door, active occupations, because of the very conditions we are trying to describe. They soon recover and become hardy. Not least among the factors tending to their recovery is the improved respiration effected and accomplished by the more active out-door employment. The advantages of walks, gymnastic exercise, horseback riding, lie largely in the improved oxygenation of the blood brought about by improved respiration; and this in turn causes the liver, stomach, heart, brain, and all the tissues to perform their functions better, waste and repair reach a normal balance, and so general improvement is effected.

But we find very many subjects who are so situated that they cannot make the needed change to active or passive out-door life, and so we must relieve them where they are. We may

tone them up, we may stimulate the torpid liver, or correct the lithiated urine, so often present in such cases; but this is only patch-work after all.

If imperfect respiration is at the bottom of all the trouble—as it often is—we need to teach the subject a lesson in physiological breathing the first thing, and then attend to diet and constipation afterwards. For instance, show him how to swell out full and round the whole chest, by a deep inspiration, elevating and throwing back the shoulders, and then when he has gotten into his lungs the last atom of air possible, to then shut it in or hold it in tightly for just a little time, and then to let it off slowly, blowing out every atom of it if he possibly can by forcible expiration, drawing the shoulders forward and pressing in the chest to the smallest possible compass, thus throwing out most all of the residual air, and all this through the nose, with mouth tightly closed. Let him take a half dozen or more such forced respirations a dozen times a day, and he will soon double his vital capacity, and relieve himself of most of his supposed chest trouble. Such forced respiration will compel every air cell possible to freely admit wholesome air into the little spaces, and to expel it also, and some air cells that do not often perform their functions healthily will be compelled to normal duty, and so healthy lung tissue will be maintained, and sometimes diseased lung tissue will be made healthy, oxygenated blood will be given to the general system, and our patient will still continue in his employment and yet recover.

I have myself reached, and have seen others reach, a difference in chest circumference, in a short time, of five inches between forced inspiration and expiration. Also I have seen them after a short time able to take a few forced respirations and then take a deep inspiration, and hold it a full minute with perfect ease. Personal experience is what first called my mind to this point, and then quite frequent observation of others after forced respiration has taught me what may be accomplished by it, and how much good this simple means may compass for us. It cannot be expected to compass the cure of extensive organic lesions of pulmonary tissue, tuberculosis, extensive pleuritic adhesions, etc. It is simply commended for the class of cases above described, and this is a very large class of our town and city people, as all physicians very well know.

—The library of the University of Aberdeen (Scotland) contains over 90,000 volumes, open to all members and matriculants under reasonable conditions.

LACERATION OF THE RECTUM, BLADDER, AND PERITONEUM, BY A FOREIGN BODY THROUGH THE ANUS.

BY TOM. M. THROCKMORTON, M. D.,
Of Derby, Iowa,

(*Concluded from page* 360.)

Some writer has stated somewhere, with how much of truth I am not prepared to say, that all deaths from chloroform have taken place with the patient on the back, and that there is much less, if not immunity from danger, when lying on the side.

In a short time she will learn how to use it herself, and may be trusted to hold the handkerchief in her own hand; inhaling as the pain comes on and withdrawing the hand as it passes off. I need not say, however, that she should be closely watched, with the finger almost constantly on the pulse during inhalation; and it is a good plan to arrange the hand in relation to the face in such a way that it will naturally fall away from it should insensibility be produced.

In this way the pain of labor may be very much mitigated, and generally without retarding the force of the uterine contractions, or endangering either the mother or the child.

Sometimes, however, it seems to cause partial inertia of the uterus, and check the progress of labor. Then we should withhold it altogether, and give a pretty full dose of some alcoholic stimulant or ginger tea, and in a short time the uterus will regain its activity, and the labor will progress with less suffering than if the anæsthetic had not been administered.

In all cases of puerperal convulsions, chloroform is the sheet-anchor, and second in value to venesection only: and I think if I had to choose between them, I would take chloroform. It may be used with advantage in case of threatened eclampsia, indicated by headache accompanying an œdematous condition of the system.

In a case that occurred in my own practice several years ago, after full venesection, and a stimulating enema, I warded off the convulsions for six hours by keeping the patient wholly or partially under its influence, and delivered her of a living child. The use of the anæsthetic had to be continued nearly twenty-four hours before the tendency to convulsions ceased. It was supplemented after delivery by the use of aconite and bromide of potassium. The child had convulsions for forty-eight hours, and was saved by the use of the same remedies.

The case is reported in full in the Transactions of the Wisconsin State Medical Society for 1875.

There is no doubt that the use of chloroform predisposes to post-partum hemorrhage, and it is therefore quite important, when having used this agent, to administer a pretty full dose of ergot at, or just before, the completion of the second stage, and to be sure that the uterus is fully and permanently contracted before taking leave of the patient.

I have stated that when properly used it is without danger. Perhaps this statement should be qualified. It, like all other powerful medicines, should be used with judgment and caution. People have their idiosyncrasies, and the same remedy does not always have the same effect on different persons. But if the administrator is watchful and careful, he will observe any unfavorable indications, and withhold it before any damage has occurred.

Dr. Wm. T. Lusk, of New York, read a paper before the American Gynecological Society, in 1877, on "The Necessity of Caution in the Use of Chloroform during Labor," in which he makes the following points:

1. "Deep anæsthesia, carried to the point of complete abolition of consciousness, in some cases weakens uterine action, and sometimes suspends it altogether."

As I have already stated, in ordinary cases anæsthesia should not be carried to that extent, and if its use seems to weaken uterine action it should be withheld altogether. And in cases of turning, when it is advisable to produce complete anæsthesia for the purpose of muscular relaxation, as soon as the feet are brought down we should wait the removal of its action, so as to have the benefit of uterine contractions in completing the labor.

2. "Chloroform given in the usual obstetrical fashion, namely, in small doses during the pain only, and after the commencement of the second stage, may in exceptional cases so weaken uterine action as to create the necessity for resorting to ergot, or the forceps."

In answer to this, I repeat again, that its use should never be persisted in when there is the slightest evidence that it weakens uterine action.

3. "Patients in labor do not enjoy any absolute immunity from the pernicious effect of chloroform."

This proposition is contradictory to the opinion of the majority of writers on this subject, and especially those of Great Britain.

Dr. Lusk backs his opinion, however, by cases in proof, of which he gives five, all being free from cardiac or pulmonary complications.

A careful analysis of these cases will show, I think, that either it was not properly administered, or that there was a peculiar idiosyncrasy that would preclude its use altogether.

In the first case the patient struggled, and the assistant closed the funnel over the respiratory passages—a proceeding that should never be permitted in the administration of chloroform.

Alarming symptoms were produced, but the patient was resuscitated.

The second and third cases were of the same patient in two different confinements.

This person evidently had an idiosyncrasy, making it dangerous to use chloroform at all. She recovered from its dangerous effects.

The fourth case was under the care of Dr. Colting. Head about emerging, when a slight convulsion took place. Chloroform given, and repeated during returning pains; tremor occurred, and pulse ceased.

The description of this case is so indefinite that we cannot form a correct opinion of the cause of death; but it is quite probable that if the rules for the administration of chloroform had been strictly observed, the result would have been different.

In the fifth case, chloroform was given preparatory to version, under direction of a Sister of Charity in charge of the hospital ward. As the patient did not rouse after the operation, a surgeon was called in, who found the pulse thready, the face blue, and respiration imperfect. In ten minutes the woman died.

It would be of interest in this case to know how long this state of things had continued, and whether or not the anæsthetic was promptly withdrawn on the first appearance of these symptoms. The proper moral of this case is, that the administration of chloroform should never be entrusted to a Sister of Charity, unless in case of absolute necessity, and then only in the presence of, and under the watchful care of a competent physician.

Some writers advocate the use of mixtures of chloroform and alcohol, or chloroform, ether, and alcohol.

Dr. Barr, of Philadelphia, is very enthusiastic over the following mixture, namely:

Ether,	3 parts.
Chloroform,	1 part.
Alcohol,	2 parts.

—and claims for it better effects with less danger than from chloroform alone. I have not used it, but from his description of its effects, I shall be inclined to do so at the next favorable opportunity. He gives it in all cases unless there are evi-

dent contraindications, and says: "The question Must I give it? should give place to, Must I refuse it?" After a large experience in its use, covering a number of years, he sums up its claims for general use as follows:

1. "The claim of the parturient for anæsthesia is unequaled by any other claim in the wide world."

2. "These claims will not have received a fair response until the anæsthetic is as common in the lying-in chamber as upon the operating-table."

3. "A proper anæsthetic is more directly indicated, and more safe, in the ordinary obstetric patient than in the surgical patient, case for case."

4. "We have an anæsthetic mixture capable of producing perfect immunity from suffering, without intoxication, without vomiting, without reaction or dangerous consequences."

5. "The babe offers no contraindications, since its safety is not jeopardized."

6. "Labor is not hindered, but rather hastened by the anæsthetic."

7. "Anæsthesia offers no contraindications for the use of medication which would be indicated in its absence."

I am not yet prepared to indorse all these conclusions of Dr. Barr, but it may possibly be well for our patients if we will take them into consideration, and practice accordingly, so far as we can do so consistently with our convictions, the prejudices of our patrons, and other circumstances that may meet us in our different cases.

On account of these prejudices, and the small, it may be, but nevertheless undoubted risk attending its use, I now scarcely ever suggest chloroform to my patients, unless I see a necessity for it; but if they ask for it, I never refuse it unless I can see some evident contraindication.

REFLECTIONS AND SKETCHES OF TOWN AND COUNTRY PRACTICE.

BY GEORGE HILL, M. D.,

Of Hughesville, Pa.

VENESECTION IN LABOR.

The remarks of Prof. S. D. Gross on lacerations of the female sexual organs, at the last meeting of the American Medical Association, should be twice read by every practitioner of medicine in the country; especially that part touching bloodletting at and before labor.

He has not covered the entire ground, to be sure, but if the teaching there enunciated is heeded, many lives will be prolonged and much suffering prevented. And a further inference is that of an unwarranted neglect on the part of the profession generally in the use of this agent—an agent, in very many emergencies, if properly directed, far superior to any other single element in the whole range of therapeutics. It is fair to opine that the *use* and *abuse* of blood-letting must soon again attract the attention of the medical profession that it merits. And certainly the time has fully arrived when those who have experienced both, and know by long and cautious use its just claim, should place their testimony where it will tell. Human life is not cheap enough to tolerate anything short of this.

TYPHOID FEVER.

The malady known as typhoid fever has been prevailing for the last three months in the east and west portions of this borough, with intervening streets free from the disease. This scourge is a familiar antagonist, I having for many years been in combat with it, in numerous invasions, both here and in Bloomsburg and vicinity. Practical observation enables the writer to assert that it is a domiciled endemic, and has been for a period of forty-seven years—asleep sometimes, but never dead.

It is a well-established fact, that the primary lesion in this disease is always found in the ileum, and in its first stage of development in the lymph follicles, in Peyer's patches nearest the cæcum, but rapidly radiating its hidden forces, until the whole *citadel* is in confusion. And this in a manner, to some extent at least, analogous to another parasitic disease, which is always initiated in the mucous follicles of the tonsils, viz., diphtheria. In typical cases the lesion of the disease in hand rapidly extends itself, not only in the ileum, but soon its effects reach the lymphatic glands, and the *pseudo-poison* radiates throughout all the splanchnic viscera of the system, until general impoverishment of both fluids and solids prevail, producing what is called the typhoidal state.

Liebermeister contends that the cause of this disease is a poison. In this he is persistent. Not a gas, but "*a solid*," requiring secondary development. Hence, he declares that it is never directly transmissible; which may or may not be true. *A poison!*

Who, on exposure, is exempt from the direful results of any substance, mineral, vegetable, or animal, known as a poison? What then, when a dozen or more persons are alike exposed to *this poison* over and over, and three are stricken and nine are in no way whatever affected? An obscure analogy!

But experience tells, with almost unerring certainty, that fear, anxiety, overwork, and loss of rest, are essential factors favoring the development of this infection. But this much is true. It resists gravitation; seeks its nidus with unerring certainty, and, under favoring conditions, does its work with unvarying method and success. And last, it perpetuates its existence in defiance of all its enemies.

September 20, 1884, I was called to see Mr. A. N——, aged forty, six miles out, where he had gone, and had been prostrated for three days. During two weeks previous he had been under the care of Dr. W. H. in one of the infected portions of the town, but at no time confined to the bed or house. He was now in the second or arid stage of the disease. Mouth partly open and dry. The muciparous follicles and salivary glands in entire suspension, with the gradual formation of the deposit known as sordes upon the tongue, teeth, and lips. I attended this man two weeks, when he died. Among the features of the case were, pulse 110 to 140; hemorrhage from the bowels; meteorism; hiccough, etc. This much for what follows: Three persons were his special attendants; first, a married sister, aged twenty-five; second, a single sister, aged twenty-three, and Mrs. R., a neighbor, aged forty-eight; the latter only an occasional night assistant during the latter part of his illness. All were stricken with the disease within a few days of each other; *and all died.* Mrs. R. was taken October 5, less than ten days after her first attention to the sick man. The inference in her case is that she must have received the *mature* or *immature* germs in that well-ventilated sick room, and nowhere else, there being no other centre of infection nearer than six miles.

Dr. E., the attending physician in these cases, told me to-day, November 26, that what is termed the *antipyretic treatment* was carried out as far as practicable; that is, "thirty-five to forty grains of quinine were given at a single dose, and if the temperature was not brought down two degrees, the same was repeated the next day," etc. "*And all this, too, without any manifestation of cinchonism!*"

Why should there be? with a brain already overwhelmed beyond response to almost any call.

(*To be continued.*)

—An exchange remarks that "rich folks do not hire poor doctors to cure them. A doctor to cure rich folks must live in a fashionable street, in an expensive house, and in elegant style." Too true! "That's the way the money goes."

Hospital Reports.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA,

BY WILLIAM PEPPER, M. D., L.L. D.,

Provost and Professor of Theory and Practice of Medicine in the University of Pennsylvania.

Reported by William H. Morrison, M. D.

Tape Worm—Erysipelas—Secondary Parotitis.

Gentlemen: I shall in the first place ask your attention to two specimens of tape worm which I have here. One was passed by a patient who was shown to you a short time ago by one of my colleagues. Almost the entire worm, with the exception of the head, is here. The patient from whom the worm was removed was aged 23 years, a painter by occupation. He does not remember ever eating any raw meat, smoked ham or beef. Fourteen months ago he began to have indefinite symptoms, such as dryness of the nose, obscure pains in the abdomen, occasional attacks of diarrhœa, some increase of appetite, and soon began to pass segments of tape worm. He had been treated four times before coming to the hospital, in what way is not known. On two occasions the greater part of the worm was brought away, but the head remained. On the other two occasions the treatment was entirely unsuccessful. On several occasions he has fainted, becoming entirely unconscious, but there has been no fully developed convulsive attack. He is nervous, and has lost considerable flesh.

In this patient there were rather unusually distinct symptoms attributable to the presence of tape worm; some of these symptoms were abdominal, while others were reflex. As you have heard, he has been subjected to five treatments, three of which were only partially successful, while two were entirely without result. If the head is left, the chances are that in a few months the worm will reform and links will again appear. We have in the specimen before us the narrow links of the neck, but the head is absent. The portion between this and the head may have been broken off and lost in the stool, so that it does not follow that because the head is not found it has not been passed. If, however, the head is not found, the chances are in favor of the reappearance of the worm.

The last treatment employed in this case consisted of preliminary fasting and purging, followed twelve hours later by one ounce of koosso.

The second worm which I show you was removed from one of my own patients. It is, as is the first worm, a specimen of the beef worm, or tænia mediocanellata. This patient exhibited fewer symptoms than did the case just described. He was first treated in May, 1884 (nine months ago). He fasted one day and took a dose of castor oil; the following morning he took two ounces of turpentine with four ounces of castor oil, with the result of bringing away only six feet of the worm. That was a severe dose, for as you know the ordinary dose of turpentine as a parasiticide is from one-half to one ounce, given either in emulsion or with castor oil. It is a reliable rem-

edy, and will often bring away the entire worm; but I do not consider it to be as reliable as some others which I shall mention.

A month later, the worm had again become fully developed, and links reappeared in the stools. He then, after fasting, took one dose of the oleo-resin of male fern without any result whatever. This is, perhaps, of all remedies, the one which gives the most uniformly good results. It certainly ranks as high as any other remedy, yet in this case it was ineffectual. In many cases, this curious fact will be noticed, that either from some condition of the patient, some special condition of the intestinal canal, or some condition of the worm itself, a remedy which succeeds in other cases, or a remedy which has at one time succeeded, will, in the same patient, at another time fail.

Then, with some preliminary treatment, koosso was taken with no effect whatever. Then pumpkin seed was taken without any effect. A short time after this, he took an infusion consisting of two ounces of pomegranate root in a pint of fluid, following this in an hour and a half with an ounce and a half of turpentime, with three ounces of castor oil, This brought away twelve or fifteen feet of the worm, and secured an immunity of about two months.

In the latter part of September, two ounces of pumpkin seed were taken and thirty feet of the worm were passed, the segments being broken off at the narrow portion of the neck. This secured four months immunity; but in January the links again reappeared and koosso was again tried. After a day and a half of absolute fasting, an ounce and a half of koosso in hot water was given in divided doses, the patient keeping quiet in order to retain the dose. This was followed by castor oil, but no portion of the worm was brought away. After this, an infusion of pomegranate root was tried, which was equally unsuccessful. Two weeks later, links were again pased, and after some preliminary fasting and purging, a dose of pelleterine, prepared by Tanret, of Paris, was given. As you know, this is the alkaloid of pomegranate. This produced no result. Two weeks later, after fasting of one day, and with no preliminary purging, a second dose of pelleterine was given. This was followed in fifteen minutes with adose of compound jalap powder, and in fifteen minutes more, the whole worm, measuring forty feet, was expelled.

These two cases are excellent illustrations of the difficulties which attend the treatment of this condition, and also of the difficulties of deciding as to the value of certain remedies in the treatment of tape-worm. The bottle which I show you contains one dose of Tanret's pelleterine. The alkaloid, which exists only in small proportion in the root, is here in a concentrated form. This is an excellent remedy, but rather expensive, the price probably being in the neighborhood of $3.50 per dose. Pelleterine, the oleo-resin of male fern, and a good preparation of koosso, are probably the most reliable remedies in the treatment of tape-worm.

As I have already said, the differences in effects at different times may be due either to differences in the state of the patient, in the condition of the intestinal canal, or in the state and location of the worm. An important element in causing these differences in effect is differences in the reliability of the preparations themselves. One of the advantages of pelleterine is its trustworthiness.

The worm thus obtained has been examined by Dr. Leidy, who pronounces it a typical specimen of the tænia medio-canellata or beef-worm.

Cases will occasionally be met with which not only present the difficulties which these instances illustrate, but also added difficulties. A few weeks ago a young woman came to me with the history that she had had a tape-worm for three years, and had been treated by physicians and by quacks some six or eight times but not relieved, although on several occasions large portions of the worm were brought away. The last treatment had occurred nine months ago, since which time she had suffered more from the symptoms of tape-worm than ever before, yet no links had been passed. There was marked irritation of the stomach and bowels, the tongue was coated, the stomach irritable, there was a vague sense of distress and of movement in the abdomen, there was impairment of strength, low spirits, loss of flesh, itching of the nose and anus, and thelike. On two or three occasions she had taken preparations procured from quacks without bringing away any links. In this case the woman had been cured without knowing it, and had remaining a chronic gastro-intestinal catarrh, in consequence of the drastic treatment which she had employed. The more efforts she made to get rid of the supposed worm, the more she increased the local irritation which was the true cause of the symptoms.

Assuring her that the simple remedy which I was going to give her would act as a slow poison on the worm, if it were there, I placed her upon minute doses of nitrate of silver, and carefully regulated her diet. In a few weeks she was much improved, and began to gain flesh; and a few weeks ago she returned to her home entirely cheerful and bright, and with the intestinal catarrh in the way of being cured.

Such cases are to be carefully distinguished from those in which the worm is present but difficult to remove. I should insist upon the presence of links in the stools, or make one trial with some parasiticide, and treat the case on general principles, waiting for links to appear. Harm is done by the use of severe remedies.

As to the mode of administration, you have had in the history of these cases sufficient illustrations of the points to be attended to. All these remedies should be given fasting, with the patient at rest so that they may be retained. If there is a disposition to vomiting, a little aromatic spirits of ammonia or spirits of camphor may be given. The fasting should be continued for several hours after the remedy has been taken, or until purging has occurred. The question whether or not to give a purge before the parasiticide, will be determined by the special conditions present. I think that generally it is not necessary, and that it is sometimes undesirable. In the second case described, the pelleterine was was on the first occasion given after a purge, and it failed to act. The second time it was given without previous purgation, and was entirely successful. It may be that the administration of

a purgative, by exciting peristaltic action, may carry the remedy too rapidly through the bowel, preventing its action on the worm.

A purgative should nearly always follow the administration of the dose. For this purpose, castor oil, colocynth, or compound powder of jalap may be employed. It is better to allow two or three hours to elapse before giving the purgative, so that the remedy may have time to act throughout the intestinal canal. The worm is then enfeebled, and the violent peristalsis and profuse secretion loosen it from its hold and sweep it away. But with the best care and the most exact attention to details, our efforts are in some cases only partially successful.

I might mention another interesting case in this connection. Ten years ago a stout middle-aged man came to my office with the request that I should treat him for a snake that was in his stomach, and which he had swallowed while drinking from a spring in the country. This snake he said had grown to such a size that it would sometimes rise in his throat, and its movements disturbed his sleep. There is no reason to believe that such a creature can exist in the human stomach, for it would be digested. It is only the intestinal parasites that can survive. I determined that there were no round worms by the administration of a dose of santonin. The patient was evidently suffering from a gastro-intestinal catarrh, and these curious vermicular movements which he interpreted as dependent upon the presence of a living creature were due to this cause. My directions as to diet and treatment were only partially carried out, and he did not improve. H returned again and again, insisting that some powerful poison be given to remove the worm. Finally, he ceased coming, and I saw no more of him for several years. Two years ago he again returned, stating that he had been wandering over the country and had spent all his money in trying to have this snake removed. I gave him some simple remedy, and he again disappeared. He appeared here last week, stating that he had been doctoring ever since, but he had not been benefited, that now there were several of these worms; that one of them had worked its way under the skin, and had appeared as a lump under the shoulder blade. The lump had been removed by a surgeon, but the snake was allowed to slip back. Seeing that the man was evidently becoming insane, I told him that if he would come to the hospital I would cut the stomach open and remove the worms. If he comes, I shall make a long incision through the skin of the abdomen, apply caustic, stitch it up, and keep him in bed for a couple of months with a sore side. If something is not done, the man will evidently become insane.

Facial Erysipelas.

This patient is an example of a mild attack of facial erysipelas. This is a constitutional disease, but we do not know the nature of its special poison. It is one of the constitutional diseases in which one attack does not protect against a second, but on the other hand predisposes to a second attack. Those who have had it once are likely to have it again. There certainly is a close relation between idiopathic erysipelas and traumatic erysipelas.

Idiopathic erysipelas may practically be called facial erysepelas, so constantly does it attack the face. Usually it begins at one of the openings, as the ear, the angle of the eye, the nostril, or the corner of the mouth. There may perhaps be some little irritation which determines the point at which it starts. Beginning at one of these orifices it spreads, and this extension is one of the most characteristic features of the disease. Sometimes, unfortunately, it extends to the mucous membranes, and we have internal erysipelas, which is a very fatal disease. This is rare, except in bad epidemic states of the atmosphere. Nearly always the affection spreads over the face, more commonly going upward from the spot first affected, it spreads to the hairy scalp, going over the head, and ends at the root of the hair, or stops before reaching this point. Less frequently it goes down the back. The inflamed parts are swollen and of a bright red color. They are hard and tender to the touch, and separated from the surrounding healthy skin by a distinct ridge. The amount of swelling may be extreme, so that in strongly marked cases the patient is absolutely unrecognizable.

The disease begins with few prodromes. There may be lassitude, aching, rigors, and sometimes a little soreness of the glands at the angles of the jaw, and then the erysipelatous blush appears at one of the points which I have mentioned, and rapidly spreads.

Fever appears early and runs pretty high, not rarely reaching 103° or 104°, and sometimes even higher. The pulse is strong, full, and quite frequent. The patient is dull, heavy, and stupid, and not rarely, when the inflammation extends to the scalp, is there a little wandering delirium, particularly at night. Sometimes the nervous symptoms are much more severe, and there may be violent active delirium, or a tendency to deep stupor. In these cases the symptoms assume a typhoid aspect, the tongue becomes dryish and brown, the pulse more rapid and weak. There is often albumen in the urine, and sometimes tube casts are found, showing that there has been as a complication marked congestion of the kidneys, and even catarrhal nephritis, such as is found complicating zymotic diseases. The inflammation may lead to suppuration in the connective tissue, particularly in those situations where there is loose tissue, as at the angle of the jaw, under the chin, and beneath the eyelid. Such cases assume a grave aspect, and not rarely end fatally.

The prognosis of ordinary erysipelas which does not run into this typhoid condition is good, the vast majority of patients recovering in from nine to twelve days.

The treatment of erysipelas may be divided into the local and general. The local treatment does very little good. All kinds of remedies have been employed with the object of circumscribing the inflammation. Blistering, the application of nitrate of silver, and painting with iodine, have been used to limit the inflammation, but without success. Soothing applications have been made to the inflamed surface, such as alkaline washes, the hyposulphites, solutions of bicarbonate of sodium and laudanum, and laudanum and lead-water. Soft ointments, as of mercury and lead, have been applied to the surface, and protected

from the air with a linen cloth. To keep the surface moist, and to protect it from the air, are the main objects to be accomplished. The inflammation is a specific one, and ordinary applications do not produce any distinct result. Alkaline washes, with opiates or mild ointments of lead or of iodide of mercury, are as useful as any. I have lately painted over the inflamed surface an ointment of iodoform with cosmoline or a solution of iodoform in ether. I have not used it sufficiently often to say that it produces a definite result.

As regards the internal treatment, all are agreed in recognizing the immense value of large doses of the tincture of the chloride of iron. The average dose is twenty-five drops in a couple of ounces of water repeated every two hours. The prognosis of facial erysipelas has been materially improved by the discovery of the beneficial influence of the tincture of the chloride of iron over this disease. It should always be used when well borne by the stomach. Quinine in moderate doses, or if there is marked fever, in large doses, is desirable.

When typhoid symptoms present themselves, I have found turpentine very useful, continuing the administration of iron. When nephritis exists as a complication, I have not found it necessary to modify the treatment. Stimulus is to be employed if called for by the condition of the circulation or nervous system. I have found digitalis to act beneficially, particularly where the heart was weak or there was renal complication, giving it with the iron and quinine. There is albumen present in this man's urine, and the more carefully I have examined for albumen, the more frequently I have found it. It is present, probably, in from one-half to two-thirds of all the cases. In those cases attended with delirium and a disposition to stupor, the presence of albu- and tube-casts is extremely common. The frequency with which catarrhal nephritis occurs in zymotic diseases is not sufficiently appreciated. It is a very common occurrence, and explains many of the symptoms which are present.

This man is improving, and will probably be well in a short time.

Secondary Parotitis.

This case has, until within the past week, been under the care of one of my colleagues; I show her to you to-day to call attention to an acute affection from which she is at present suffering. She is seventeen years of age, small and juvenile for her years. Her father was killed by an accident, and her mother died of small-pox. She had the ordinary diseases of childhood, but otherwise was well until three years ago, when she had diphtheria. During convalescence, she was attacked with chills and fever, and since then has never regained her health. She came under observation four months ago, complaining with pain in the left side, and examination showed great enlargement of the spleen, which extended across the abdomen, encroaching somewhat upon the right side. Examination of the blood showed the number of the red corpuscles to be diminished, while the number of the white was slightly increased. She remained in the hospital, and has since then gradually increased in weight.

Within the past month treatment by the deep injection of Fowler's solution into the spleen was instituted, and about ten injections had been given, when ten days ago she was taken with severe pain over the spleen on movement, and the temperature went up to 102°. It, however, quickly fell to normal. The appetite was lost, the tongue was dry and glazed, and sordes collected around the teeth and on the tongue. Poultices were applied, and nine grains of quinia were given daily. She rapidly improved, the appetite returned, the tongue became clean. There was still a little pain on movement. This was, I think, an attack of local peritonitis excited by the injections.

On February 19, without any special warning, the temperature went up from 98° in the morning to 105.4° in the evening. It remained at this point for only a short time. Yesterday morning (20th), it was down to 102°, and to-day it is 99.5°. With this febrile action, there was the development of parotitis on both sides, although more marked on the left side. Both parotid glands are much swollen. They are hard and tender on pressure, and swallowing or chewing causes pain. It is easy to distinguish this from adenitis. In that case there are several glands swollen just below the angle of the jaw, but no swelling extends above the ramus, and there is absence of the peculiar shape of the parotid.

Parotitis or mumps, something like erysipelas, is either an idiopathic or secondary affection. Idiopathic mumps is a specific, contagious, constitutional disease, and far most common in children. It affects often one gland and then the other, sometimes both at the same time, but usually both before it is done. It is attended with marked swelling and hardness of the gland, pain upon opening the jaw, and upon pressure. There is moderate fever and occasionally slight nervous symptoms. It terminates by resolution in the course of from five to ten days. Occasionally, in the male, there will be a sudden subsidence of the parotid swelling and a transference to the testicle. With this, there is often the development of high fever, with a temperature running up to 105°, 106°, 107°, and threatening nervous symptoms from the hyperpyrexia, requiring the most prompt measures to reduce the temperature. In the female, the transference of the inflammation to the ovaries or mammary glands is less common.

Secondary parotitis occurs in septic conditions of the system. It is common in pyæmia. It is not at all rare in small-pox. A short time ago I showed you a marked case in a patient with typhoid fever. Unlike idiopathic parotitis, it is apt to run on to suppuration and is apt to discharge through the ear. The prognosis varies with the cause. In pyæmia it is of course nearly always fatal. Although I have seen parotitis in a number of bad cases of typhoid fever, yet they have generally recovered.

The cause of parotitis in this case is somewhat obscure. I am, however, disposed to attribute it to the traumatic irritation of the spleen, and that the disease is secondary in its nature, dependent upon the inflammatory changes thus set up in the spleen. The condition of the patient was a very grave one, or the injections would not have

been attempted. They will of course now be suspended.

The danger from this attack of parotitis appears to be slight, and the patient is recovering. I shall, however, bring her before you again, in order that we may carefully study the chronic conditions which are present.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

(*Continued from page* 367.)

Dr. J. M. Anders read a paper on

Sanitary Influence of Forest Growth and Public Squares.

saying:

"Than the present there could, perhaps, be no more opportune season for making a careful examination of our theme. The public press, as well as scientific writers, not infrequently have been and still are raising a timely cry of warning against the wanton devastation of our primitive forests. That such remonstrances are not needless must become clear to any one who will take the trouble to carefully examine more particularly the recorded painful experiences of many oriental countries as the result of human improvidence—the physical history of this portion of the globe furnishing numerous examples. To mention only a few of the more striking: Spain, Southern Italy, Persia, Greece, and Southern Africa. It is the almost universal experience of tourists that wherever in past time the forests have been cleared away by a people, the effect has been most lamentable, the smaller streams drying up, followed by infertility of the soil, insalubrity of the climate, and frequently utter desolation. To further pursue this line of evidence would be unnecessary, in view of the fact that the writer proposes to bring forward the positive evidences at our command, showing how forests affect conditions of soil and climate.

"There is perhaps no element of this subject better understood than the influence which forests exercise mechanically. Clumps or belts of trees act as efficient intercepters of wind-currents, affording shelter and protection to humbler vegetation and man to the leeward, from the chilly blasts of winter as well as the drying winds of summer, thus having the effect of modifying extremes of temperature, rendering summer less sultry and winter less severe. In France the experiment has been tried of planting trees in belts one hundred metres apart, and with marked benefit to the climate, the happy effect in this instance being ascribed principally to their mechanical action.

"As has been frequently remarked by writers upon the subject, trees in masses or belts, or even heavy shrubbery placed between the originating points of the germs of malaria and human habitations, afford efficient protection from malarial diseases. From the multiplicity of recorded observations by physicians living in malarious districts, this fact may be looked upon as fully proven. Whether this effect is attributable, as most authorities believe, to a mechanical action, or as some have endeavored to show, to a chemico-vital process, is still, perhaps, a mooted question. Prof. Austin Flint has remarked that "malaria has an attraction for trees and other organic material." Now it has been recently shown that many species of plants produce ozone; and, as this substance has the power to destroy organic impurities or even disease germs in the atmosphere, it may, with good show of reason, be assumed that, to some extent at least, the germs of malaria are oxidized by the ozone developed by the forest. And may we not in this manner offer an explanation of the so-called affinity of Flint and others, which malaria has for trees and shrubbery? It is, however, highly probable that the influence of trees and humbler vegetation in this regard is largely mechanical. It would be an easy task to give numerous illustrations of the influence of forests in question, as for instance, when the removal of vegetable growth suitably located was followed by malarious diseases in localities where it had been previously unknown; but as this has been frequently done by medical writers, it is not deemed necessary here.

"During the warm season the temperature of the air of the woods is lower than that of the air outside. This is due partly to the cooling effect of the shade and, partly, as first pointed out by Petenkofer,* to the slight draught which is always caused by shade in the open air. Again, according to Ebermayer, the temperature of the trees of the forest is found to be lower than the air in the forest. There is yet another way in which forests cool the atmosphere. As will appear evident hereafter, one of the chief functions of woods in nature's economy is to maintain a proper standard of humidity of the air; and it is well understood that any increase in the humidity of the air reduces the temperature. Dr. Frankland is made to say that he considers the moisture in the atmosphere of England as 'reducing the temperature from fifteen to twenty-five degrees.'†

"Forests are great natural dispensers of moisture. Wherever a fair proportion of woodland exists, a considerable influence is thereby exerted upon the hydrometeorology of the region. This is due to a function actively carried on by plant life in general, viz., transpiration, and its high importance demands a moment's consideration. As the result of careful experimentation, it has been found that a single square foot of leaf surface, in the case of soft, thin-leaved plants, will, during fair weather, exhale aqueous vapor at the rate of one and a quarter ounces daily. At night the rate is only about one-fifth as rapid as during the day, and during rainy weather there is absolutely no evaporation. Upon a moment's reflection on the above rate of transpiration, it must become evident that the amount of moisture yielded to the atmosphere by a forest, is really marvellous. In order to give a more definite conception of the vastness of this process, it may be pardonable to introduce here a few deductions, based upon an experimental study of the com-

*Popular Science Monthly, February, 1878.

†Dr. Blodget, "Jour. Am. Med. Association," August 23, 1884. "Transpiration of Plants," Amer. Nat. for March, 1878, by author.

parative evaporation from leaves, the soil, and water. 1. It was found that transpiration from the forest was twice as great as from an equal area of open soil, even when the latter was kept moist. 2. That more water is emitted from a forest than from an equal body of water. Under these circumstances, it will not be considered an exaggeration to say that there exists a relationship between forest growth and atmospheric humidity.

"The old question, Do forests in any way influence the rainfall? is not as yet quite satisfactorily determined, a few acute observers claiming their effect in this direction to be entirely negative. But in view of the facts already stated as the result of direct experimentation it cannot be questioned that over and to some extent around the forest the air contains a greater proportion of humidity than is found elsewhere. By a careful computation, the writer has been able to demonstrate that not less than half of the rainfall during the summer months, or vegetative period in our latitude (which would be at least twelve inches), can be accounted for by transpiration, and this, too, where the percentage of woodland is only twenty-five. Add to these facts what has already been intimated as regards the demonstrable variation in the temperature of the forest and the air outside, and it is clear that we have here conditions strongly favoring local precipitation. Furthermore, it seems irresistible to conclude that a warm current sweeping over a country, and striking the cool, moist air overhanging and surrounding the forest and mingling with it, would result in condensation. On the other hand, should there come along a stray current of a lower temperature, this same moist canopy would doubtless have a portion of its contained moisture condensed in the form of rain. It should be distinctly understood, it is not claimed for forests that they increase the aggregate annual rainfall, since the total annual evaporation and precipitation bear a constant relation. The effect, then, of woods upon precipitation is local in character; and whilst they do not affect the general course of storms, they are capable of promoting gentle showers, and within certain areas and limits of time influence the amount and distribution of precipitation. Forests also produce abundant dews, which shed their enlivening influence to fields and valleys round about. When we remember that in some portions of our globe, *e. g.*, Egypt and Arabia, nearly all the moisture that reaches the earth is in the shape of dew, it will be conceded that this is no mean office on the part of sylvan nature. Numerous authorities might be cited in confirmation of the above position concerning the effect of woodland upon the rainfall, but time and space forbid.

"It is a fact of great importance that transpiration is not governed by the same physical laws as evaporation from soil and water, the chief exciting agent in the former case being the sun's rays, whilst the latter is mainly influenced by temperature and dryness of the air. This implies less variation in the amount of moisture exhaled from vegetation as compared with terrestrial evaporation, and thus *insuring a more uniform standard of humidity in the vicinity of our forests.* There is another fact which lends support to the same view, to wit: that the trees are at all times supplied with a pretty good abundance of moisture for transpiration—owing partly to the power which the roots have to attract moisture from every direction, partly to the retention of the rainfall in their network of rootlets, to be in due season absorbed by the myriads upon myriads of root hairs. Before dismissing the question of the relation of forests to atmospheric humidity, it seems incumbent to state briefly two minor propositions which, in some degree, affect it: First, that very little, if any, moisture is absorbed by the leaves from the atmosphere. Second, that the evaporation from the soil of the woods is interfered with by the leafy canopy above, which in a great measure prevents the rays of the sun from reaching the earth and warming it so as to facilitate the process. Thus it happens that there is only about one-half as much evaporation from forest as from open soil.

"The question here naturally arises, does plant humidity differ in any essential particulars from ordinary humidity? or, in other words, has it, regarded from a sanitary point of view, any important advantages over the latter? The fact already intimated, that forests supply moisture to the surrounding medium with great regularity, even in time of drought, must be looked upon as having a special significance in this connection. As shown by the observations of Prof. Tyndall, the humidity of the air very greatly influences the climate, and more particularly the temperature range. He has conclusively shown that the aqueous vapor in the air has the power to intercept nocturnal terrestrial radiation. When, therefore, the atmosphere contains the proper proportion of moisture, the daily range of temperature is not great, but, on the other hand, it is evident that a low humidity would admit of active radiation, and, in consequence, great nocturnal fall and daily variation in temperature. The greatest objection, it may here be said, to high and dry climes, is this great diurnal range of temperature. From these experiments of Prof. Tyndall, it is clearly established that the great uniformity of forest humidity would insure the most equable climate, with small daily fluctuations in temperature, which, so far as pertains to public health, is of higher importance than the average temperature of seasons.

"Forests produce ozone. In a previous article, the following, among other conclusions, as the result of numerous experiments, were reached: First, that foliage plants did not generate ozone. Secondly, that all flowering vegetation was capable of generating this substance.* Subsequently, additional experiments proved that the conclusion arrived at in the article here cited must be so modified as to include among ozone-generating plants those which, though not flowering, have *odoriferous* foliage. Branches taken from the pine-tree and the hemlock spruce (*Abies Canadensis*), were found to be active generators of this substance. There is, to a great degree, a confirmation of these researches in the observations of Dr. Nicholson, who found ozone more abundant in pine forests than the open country in summer,

* The Exhalation of Ozone by Flowering Plants. Amer. Nat., April and May, 1884.

but less abundant in winter ;* also in the statement of Dr. Schrieber, of Vienna, to wit, that the terebinthinate vapors exhaled by coniferous plants possess, to a greater degree than any other known substance, the power of converting the oxygen of the air into ozone,† It cannot be questioned but that ozone is the chief natural purifying agent of our atmosphere from all organic matter.

"As already incidentally intimated, the atmosphere of the pine and hemlock forests is impregnated with balsamic vapors. The observation has also been made that children playing among our common poppy plants will exhibit signs of the physiological action of opium. In view of such demonstrable facts, there can be no doubt of the correctness of the view elsewhere expressed; that it is quite reasonable to conclude that with the rapid transpiration of aqueous vapor from a tree or plant, as shown by our investigations, there are peculiar to the species, active principles, which also assume the gaseous form and are held in solution by the moist vapors given off.‡ Plant humidity, therefore, it will be concluded, differs vastly from that derived from dead organic matter, the soil, or bodies of water, since it is changed, purified, and probably endowed with medicinal properties in passing through the vital laboratory of the plant.

"In the next place let us consider the influence of forests upon the soil and running streams. It is a noteworthy fact that many of our smaller streams and rivulets owe their origin and permanence to forests. It has been incontestably shown by a host of observers, that where forests have been cleared away springs and smaller streams have quickly dried up, and have reappeared after re-afforesting the same districts. Again, in a perfectly conservative spirit, the same conclusion will be arrived at by thinking of the matter from a different standpoint, and considering how they act in producing this effect. Very much after the fashion of a sponge do the roots and meshes formed by the network of small rootlets entangle and retain the rainfall, preventing it from running off quickly into the streams, thus resulting in frequent freshets, to be followed by periods of drought. The influence of woods in preserving an equable supply and distribution of water is of great hygienic importance.‖

"The influences which forests exert upon the soil are highly important, but frequently misunderstood. From what has already been adduced as relating to the effects of forests upon local climatic elements and running streams, it may justly be concluded that they do preserve a more uniform degree of moisture in the soil in their vicinity. It is usually asserted by writers upon the subject that the soil of the forest is more humid than open soil. The explanation of this is to be found in the well-known facts, that its temperature is lower on account of not being exposed to irradiation, and that the covering of fallen leaves acts mechanically in preventing the escape of moisture.

"Under other conditions, as when located in marshy districts, forest growth has a decided drying effect upon the soil. This can be explained by the extremely active transpiration by the leaves of the trees. This process goes on at the same rate so long as there is moisture at hand, in this manner soon getting rid of the redundancy, especially during dry periods of time. Again, the trunks and branches act as large reservoirs for the storage of a great part of the rainfall, which is drank up by the roots almost as soon as precipitated. It would, therefore, be expected, from these considerations, that low marshy ground would be rendered drier by the cultivation of trees in due proportion, and there are recorded familiar observations of a practical kind to bear out this idea.

"Mr. D. Howitz, Forest Conservator of Denmark, in a parliamentary report on the resources and need of Ireland for forest cultivation, observes, 'that swamps and morasses are created in Ireland from the want of trees to drink up the superfluous moisture.' According to the observations of Gimlet in Algeria, extremely malarious districts have been rendered quite harmless, in four or five years, by the absorbent action of, and evaporation from, the *eucalyptus globulus*. The efficacy of forests in preventing inundations and the washing away of superficial strata of soil, causing erosions and even deep ravines, should be mentioned as, however, affecting chiefly agriculture and other industries of civilized life.

"From the various climatic and terrestrial influences of forest growth that have been considered, it is quite clear that they exert a potent influence upon the salubrity and healthfulness of a locality. The woodland air is highly invigorating, as evidenced by the happy results of camp-life in the wilderness, and the benefit derived by 'run down' subjects from leading an active nomadic life among our forests, at low or moderate elevation. Forest trees and plantations have an æsthetic influence. The impressions they make upon the organs of sense serve admirably to relieve mental tension, and agreeably entertain the mind. And thus practical experience agrees entirely with what would be expected from our knowledge of the character of forest air, viz.: that it is a more or less humid atmosphere, charged with principles possessing therapeutic properties, and containing that highly important substance, ozone. It ought to be here stated that the proper ratio of woodland, for ordinary sanitary purposes, is not less than twenty-five per cent. And since the effects of woods upon the air are limited in area, their proper distribution, so as to improve the whole body of the atmosphere to an equal degree, becomes a matter of the greatest moment.

"Having shown that forests have a considerable influence upon the degree of saturation of the air, it follows that in conditions of ill-health, requiring for their treatment a more or less humid air, forest growth in due proportion would serve the purpose admirably. They must, therefore, be capable of rendering energetic and valuable service in connection with health-stations. Now, as to the value of atmospheric moisture in the treat-

* Michigan Health Board Report.

† Address before the Austrian Meteorological Society.

‡ "Relation of Forests to Health Resorts," Phila. Med. Times, May, 1884, by the author.

‖ Their action in this particular direction likewise has a marked effect upon the industrial arts and productive resources of a region.

ment of invalids, and particularly that large and unfortunate class—consumptives—there is great diversity of opinion. Doubtless, however, the majority of authorities have pronounced in favor of high altitudes over the lower, moister climes, in consumption. It should be recollected that the air of the forest cannot be spoken of as containing excessive humidity, and we have experimental data to bear out the correctness of this view. The observations of L. Fautial and A. Sartioux, pertaining to this point, will justify a citation. 'We now made the following observations in the heart of the forest of Helatte, which embraces 5,000 hectares of land. At the height of about six metres (twenty feet), above a group of oaks and hornbeams eight or nine metres, we placed a pluviometer, psychrometer, maximum and minimum thermometers, and an evaporator, so as to ascertain at that point the amount of rainfall, the degree of saturation of the air, and the temperature and evaporation. In open air, at a distance of only 300 metres from the forest, and at the same height above the ground as in the former case, we placed similar instruments, under the same conditions. With regard to the rainfall and degree of saturation, the observations for six months showed the total rainfall to be 192.50 mm. in the forest, and 177 mm. in the open air; difference in favor of the forest, 15.50 mm. The degree of humidity for the open air showed a mean of 61.7°, and in the forest 63°; difference in favor of the forest, 1.3°.'

"According to these experiments, the relative humidity over this extensive forest is somewhat greater than outside; still, the excess is not great enough upon which to found a reasonable objection to the presence of a fair percentage of forest growth at health resorts, excepting, perhaps, where an extremely dry clime is desirable. Moreover, by careful attention to the character of the vegetation, and percentage of woodland, and elevation, the degree of saturation of the atmosphere desired could be attained. Thus, at a resort of medium altitude, not more than fifty per cent. of forest area would produce an effect suited to cases of phthisis requiring a comparatively dry climate, since the small increase in humidity thereby occasioned would be more than counterbalanced by other beneficial influences already mentioned, such as the generation of ozone, the mechanical effects in protecting from malaria and objectionable wind-currents, besides minor influences, which act as valuable adjuvants. Attention may be very briefly called to some of the conditions that would receive benefit in an atmosphere of the above character, viz.: the earlier stages of chronic phthisis, as it is most generally encountered; catarrhal forms of the disease, with marked inflammatory action extending along the laryngeal and bronchial mucous membranes, seen most frequently in cold, raw climates, and having their origin usually in 'taking cold,' as well as cases of chronic bronchitis and laryngitis. In those predisposed by inheritance to lung disease, a residence in an atmosphere such as just described would prove a most powerful prophylactic measure. The practical value of plant exhalations, as preventive agents in consumption, as well as the healthful practice of cultivating plants, both indoors and out, have been elsewhere discussed.*

"There are in the United States numerous delightful resorts with a proportion of forest growth suitable for the above category of patients, both during the summer and winter seasons. Without stopping to describe any particular resorts, it may suffice to say that they are to be found through the northwestern States of Minnesota, Wisconsin, Colorado, and Nevada; or, starting from the northern coast line of New England, and passing in a southerly direction, we see them in New York, Pennsylvania (in good numbers), Virginia, and through the Carolinas. Should his strength admit of it, a patient having any of the conditions above described should be recommended to spend an active moving life, making frequent woodland excursions, since exercise is highly essential to realize the greatest benefit from the pure, vitalizing forest air.

"It is an important observation that from the structural peculiarities of the pine leaves, being dense and having a thick cuticular covering, the function of transpiration is carried on at about one-third of the rate as from forest trees having soft, thin leaves, so that the effect of the pine woods upon the degree of saturation of the air is actually very slight, and hence they can scarcely be said to be open to the same objections in this regard as other forests, even though the percentage of woodland should be very high. Besides, as has been seen, the pine exhalations are among the chief natural agents which produce ozone, and what is not unimportant, the pine tree flourishes well in dry, sandy soil. It follows from all this that in all the various conditions of phthisis in whose treatment the element of dryness is indicated, the air of the pine grove on an elevation offers advantages superior to those of forests composed of different other species. Fortunately, pine forests are not infrequently found to be so highly favorably situated, *e. g.*, Roan Mountain, North Carolina, has an elevation of 6,394 feet, and is covered with vegetation almost to its summit. Near the base of the mountain are found the walnut, oak, maple, gum, poplar, magnolia, and other species; whilst in the higher regions, evergreens, spruces, and pines abound. The practical value of pine groves in the treatment of consumptives is well established.†

(*To be continued.*)

—Before a recent meeting of the Academy of Medicine in Ireland, Dr. Kilgariff showed a great toe removed for epithelioma of the matrix of the nail from a man aged 62. It appeared two years ago. It had a villous appearance. Dr. Coppinger observed that the cells were of smaller size than were usually met with in epithelioma of the lower limbs, and there was less vascularity than usual. The history of the case pointed to a slow growth, which, after existing in the toe a long time, became ultimately malignant.

*House Plants and Lung Disease. Trans. Med. Soc. Pa., 1883, by author.

†Reports of cases in which pine woods have been highly serviceable must be omitted.

EDITORIAL DEPARTMENT.

PERISCOPE.

Pneumonia in High Altitudes, and its Treatment with Jaborandi.

Dr. J. W. Brown thus writes in the *Jour. Am. Med. Association*, March 7, 1885:

The greater prevalence of pneumonia in proportion to the population, and its much higher rate of mortality in mountain altitudes than at the average elevation of the earth's surface, set the writer, about six years ago, to seek about for a plan of therapeutics of greater efficiency than that generally practiced and approved. About that time jaborandi came into use, and there were notices in the medical journals of its efficacy in the treatment of dropsies by virtue of its peculiarly powerful influence on the sudoriparous glands. Its wonderful diaphoretic power pointed it out to the writer as being possibly a useful agent in the treatment of pneumonia in its early or formative stage, with the object in view that by its means an abortion of the disease might be effected, by limiting the effusion, and thus averting the perils of a fully developed pneumonia.

An immediate trial of the drug seemed to confirm the supposition, and an invariable use of it for the last five years in the formative stage of pneumonia has been productive of such extraordinarily beneficial results, apparently, that the writer is induced to present the experience and the method to the attention of the medical profession, asking their indulgence to the extent of first putting the method to a fair trial, and then approving or condemning as the results may warrant.

There is nothing of originality claimed in this practice by the writer, for he is fully conscious that the result of the action of the drug is identical with the result of the action of the steam-bath or sweat-bath practiced by Thompson and others with the same end in view—the abortion of pneumonia in its formative stage. This resort to an almost obsolete method has been the outcome of necessity, in an endeavor to obviate the almost certain death that follows upon a fully developed pneumonia in the altitude of the writer's practice, viz: An elevation ranging from eight to twelve thousand feet above the level of the sea, in the San Juan mountains. An exceedingly high rate of mortality, and a greater prevalence of the disorder in proportion to the population than at lower levels, accords, we believe, with the experience of every practitioner of medicine in the mountain altitudes, and a firm conviction of the efficiency of this method as a result of five years' experience with it has led the writer to lay this report before the medical profession, sincerely believing that its general adoption will materially diminish the mortality resulting from simple pneumonia, whether occurring in mountain altitudes or at the level of the sea.

We give a few illustrative cases:

Case No. 1. Mrs. S., aged 30, merchant's wife. Had had pneumonia, according to her own account, several times before at Del Norte, about seven thousand feet above sea-level. Had probably had pneumonia before, because she detailed the symptoms of pneumonia of her own accord, viz: A chill, with a sense of shortness of breath, followed by pain in the chest, cough, bloody expectoration, fever, prostration, and three or four weeks' sickness—she being at the point of death part of the time, and all the while under the care of a regular practitioner. About five years ago was called to see her; found her in a rigor which was very marked. Her face was cyanosed, extremities cold, she was shaking from head to foot, and her teeth were chattering as though she had an ague, and she complained of a shortness of breath. She said; "I am going to have pneumonia; I recognize it, and I am afraid of the result." She was then living 9,400 feet above the sea. Ordered her put to bed immediately, and prescribed:

℞.	Ext. jaborandi fl.,	ʒiv.
	Spts. ammon. aromat.,	ɱxl.
	Syrupi simplicis,	ʒiv.

M. S.—One teaspoonful every two or three hours to induce profuse perspiration.

She was put to bed, covered heavily with blankets, surrounded with hot irons wrapped in wet cloths, the irons being placed close to her body and the mixture administered as directed. In about twenty minutes she commenced to perspire profusely, and the sweating was maintained at its highest pitch for about six hours. Her bedding and clothing were then changed, her body wiped dry, and fifteen drops of the mixture were administered sufficiently often during the night to keep her skin moist. The next morning she got up at her usual time and resumed her household duties. During the day she expectorated a small quantity of pneumonic sputum, and complained of a slight feeling of soreness in the lower lobe of the right lung, but recovery was almost immediate. She did not go to bed again on account of this sickness, and she had no further medication on that account.

Case No. 2. J. B., a miner, aged 54. Lived in a miner's cabin about four miles out of town, and at an elevation of about 10,000 feet. On inquiry found that he had the symptoms of commencing pneumonia. Prescribed the mixture of the above prescription, and gave directions as in the preceding case. The next day the brother reported the patient better in some respects, but worse in others. He said the patient had retention of urine. Went up to see him and found him on his knees in bed, vainly trying to void his urine into a tin cup. Introduced a catheter, and found the bladder almost completely empty. Ordered cold water to be drank in plentiful quantity, the patient having abstained from drinking water for fear of aggravating the supposed retention of urine. He expectorated pneumonic sputa for two or three days, but within a week he resumed his work. In this case the sweating was so extreme that the skin had temporarily almost entirely

usurped the function of the kidneys in the elimination of water, and the small quantity of urine in the bladder—a few drops only—was very acrid and irritating. The kidneys resumed their function in a few hours.

Case No. 3. J. K., aged 24, a miner. Lived at Ophir, thirteen miles away, across a mountain range, and at an elevation of 10,000 feet. He was taken with a chill at four o'clock in the morning. I arrived at his bedside at half-past four o'clock in the afternoon, so that the disease had a start of twelve hours and a half. From description given by messenger, a diagnosis of pneumonia was made out. The patient was in bed. Face was dull and leaden in color; he had fever, cough, pain in the right lung, and a sense of shortness of breath, and the floor near the head of the bed was covered with a bloody expectoration. The floor was spattered with pneumonic sputa all over an area three or four feet in extent in all directions. Physical examination showed a dullness in the lower part of right lung, with subcrepitant rales. This was a case of plastic pneumonia beyond the shadow of a doubt, and it had a start of twelve and a half hours. He was treated in the same manner as the two preceding cases. In a quarter of an hour beads of sweat stood out on his forehead, and the patient was informed of the certainty of a speedy recovery.

As the sweating progressed, he experienced proportionate relief. The sweating was continued at the highest pitch for nearly eight hours. Ordered a diminished dose of the mixture, continued for two or three days, gave general directions for his further management, and dismissed him with orders to report if necessary. In a week he resumed his work, having made a complete recovery.

Case No. 4. J. C., saloon-keeper, aged twenty-four. Had had pneumonia two years previously at Leadville, and was confined to his bed three weeks, being very dangerously ill, according to his own statement, most of the time. He spoke very flatteringly of the physician in charge, on account of the good care rendered, and expressed himself as very lucky that he finally recovered, the prevalence of the disease and the rate of mortality being exceedingly great at that time at Leadville. Was called to see him on a Sunday afternoon, at half-past three. He had been taken with a chill at seven o'clock in the morning of the same day, so that the disease had a start of eight hours and a half. His pulse was full and bounding, expectoration profuse and typically pneumonic; there were fever, a dull, leaden face, pain in the right lung, cough, and a sense of a want of breath. Examination gave the physical signs of pneumonia. He said it was the same thing he had at Leadville. He was treated in the same way as the preceding cases, with the same exceedingly profuse diaphoresis as a result, and the same relief. He remained in bed till the following Thursday morning, when he got up at the usual time and resumed his regular occupation. He was dismissed on Thursday morning without further treatment, and two days after was apparently well. Other cases may be given, and some who have walked the street within two days expectorating pneumonic sputa, after being subjected to the jaborandi sweat-bath ordeal, without relapse or further inconvenience, convalescence continuing to perfect recovery in a few days thereafter.

These cases are but examples of the usual behavior of pneumonia treated by the jaborandi method, in the formative stage, so far as the experience of the writer goes, during the last five years; so that he feels compelled to advocate a more general trial of the method, having had two cases only of death from this disease in five years, one being a case of neglected pneumonia, which had developed to the involvement of two-thirds of the right lung in pneumonic solidification, death taking place suddenly on the day after the first visit and apparently from heart-clot; the second case being that of an old man whose constitution was already shattered with hard drinking, and in whom the disease, if it were pneumonia, developed insidiously and resembled as much a hemorrhage as pneumonia, the symptoms were so anomalous.

In the practice of the writer, he feels that pneumonia has lost its terrors even in these high mountain altitudes, whereas before this practice the mortality was great, and the doctor overwhelmed with a sense of helplessness. A case of simple pneumonia that would recover without any care, other than that of simple hygienic management, at sea-level, seemed, in these altitudes, to be almost necessarily fatal, and recovery from double pneumonia an impossibility. The only safe way in mountain altitudes is to abort the disease early, before the advent of symptoms indicating asthenia, and this can be done at any time previous to the appearance of asthenic symptoms by the simple method detailed herein; that is to say, limitation of the extent of the solidification may at any time be effected before symptoms of asthenia make their appearance, so that as small a portion of a lung as possible may be rendered useless by solidification.

The excessive mortality in pneumonia at mountain altitudes, over that at the average level of the earth's surface, seems to be due to the rarefied condition of the atmosphere mainly, its chemical composition being the same as everywhere else in open country, as shown by chemical analysis of three specimens, one of which only showed a trace of ozone.

Exhaustion seems to take more rapidly on this account, due, probably, to a deprivation of oxygen. At 10,000 feet, a volume of air of sea-level density expands into about one and one-half volumes, so that a man in health needs to breathe a quantity of air greater in volume by one-half in order that the tissues of the body at large may be supplied with the requisite quantity of oxygen. Hence, probably, the greater gravity in mountain altitudes in cases in which a considerable portion of a lung becomes solidified. In an inflammation of lung-tissue there seems, also, to be a greater rapidity in the spread of the inflammatory process to adjacent lung-tissue, probably owing to increased functionation, and hence the necessity of a more active treatment to stay the inflammatory process and effect resolution. That a pneumonia may be aborted the writer has no doubt, judging from these results, however crude the experiments may be; and that the duration

of the disease is in ratio with the extent of the solidification, and inversely; also that the extent of the solidification bears a relationship to the time elapsing between the initiatory chill and the establishment of a thorough derivation by profuse diaphoresis.

It would seem, also that the pathological condition is a simple inflammation independent of zymotic influence, as the remedial agent in its action is purely physiological; a derivative influence only being exerted from the lung tissue to the cells of the sudoriparous glands—otherwise, on the cessation of the physiological action of the drug, the zymotic influence still persisting, the pathological process ought again to be awakened.

The method described is inapplicable after the appearance of asthenic symptoms, because the mischief sought to be averted is already in existence and is the cause of the asthenia, viz., a fully developed pneumonic solidification. If it is now too late, the only resort remaining is the method of support and hope, both together, in these mountain heights at least, being inadequate to the making of a lung largely hepatized to breathe a sufficiency of oxygen for the needs of the economy, when in its full capacity this is about all that it can do.

The writer has taken advantage of the sudorific power of jaborandi in the treatment of other inflammatory affections, and notably in the treatment of quinsy and bronchitis, and with results similar to those obtained in the treatment of pneumonia. But in all instances it is a remedy only in the formative stage.

Vertebro-Meningeal Rheumatism.

Dr. J. E. Blomfield thus writes in the *Lancet*, January 24, 1885:

The case of which the following is a short account occurred in the practice of Professor Jaccoud, at the Hôpital de la Pitié, Paris. Taking into consideration its rarity, and the facility with which the diagnosis of rheumatism could be established, it is worthy of wider notoriety than is afforded by being the subject of a clinical lecture, and is certainly interesting as a contribution to our knowledge, which is far from complete, of the various phenomena of rheumatism. The patient was a man of robust appearance, forty years of age, who had enjoyed good general health until the 24th of January of last year, when he presented himself at the hospital complaining of pain in the region of the neck, of the shoulders, and in both upper extremities. This painful state was not produced by degrees, but had arisen suddenly without assignable cause. The pain was violent, and, according to the description of the patient, it seemed as if his arms were being twisted off. The slightest movement increased the pain. The seat of the pain was not localized, but it seemed to shoot down the arm. The neck was held quite rigid by the contractions of the muscles, so as to prevent any movement of the cervical vertebræ, and this part of the spinal column was bent backwards so as to constitute a slight opisthotonos.

On examining the arm there was nothing seen to account for the pain. There was no redness or swelling, and the joints themselves were quite free from any suspicion of disease; but it was possible to discover that certain areas of the skin were devoid of sensibility; and, further, that these points were spontaneously painful—that is to say, the patient presented the phenomena of *anesthésie douloureuse*. When seen by Professor Jaccoud it was discovered that the region of the spine marked by the fifth, sixth, and seventh cervical vertebræ was very tender. Pressure over this region increased not only the local pain but also the pain down the arms; and taking into consideration the character of the pain and the local tenderness, the Professor came to the conclusion that the lesion was central, and, further, that it was rheumatic, because there was no history of a blow or other injury. There was no evidence of syphilis or tubercle; in fact, he considered it as a case of articular rheumatism of the upper part of the spinal column, involving the meninges; and, in accordance with this opinion, ordered a treatment of sodium salicylate. But to complete this diagnosis there was one point wanting, and that was the temperature. On the day of examination the patient's temperature was normal, but in the evening it rose to 39.4° C., thus supplying the fact which was missing. The correctness of the diagnosis was well illustrated by the treatment, for the effect of the sodium salicylate was marked and immediate. The pain diminished, and with it the rigidity; and by the end of February the patient left the hospital practically cured, only a slight rigidity of the neck remaining, obviously due not to the muscular contraction, but to the articular lesion. But in the first fortnight of March he presented himself again at the hospital in exactly the same condition as before, with the addition that the lower limbs were also affected in a similar manner. Soon, however, another manifestation showed itself, which is of great importance as adding another item of support to the diagnosis, and that was the tumefaction and redness in the left knee and ankle.

The patient was now a hopeless cripple in bed, not daring to move a limb because of the pain, which, as before, was much exaggerated by any movement, though when encouraged to make the requisite effort it was found that perfect power over the muscles was retained. This, however, did not last long, for towards the end of March it was found that there was a loss of ability to move the limbs, however much the patient tried; in fact, there was a complete akinesia and anæsthesia of all four extremities. It is an interesting fact that this loss of motion appeared first in the arms and afterwards in the lower limbs. The treatment adopted at this time was iodide of potassium: but no marked benefit was noticed, and the patient continued in much the same state during April, with the exception that defecation and micturition became affected, and the patient passed his motions under him unconsciously.

In the month of May mercurial inunctions, night and morning, were added to the previous medication, not with the idea of counteracting any syphilitic taint, but because of the well-known property of mercurials of removing plastic deposits, to which his troubles were attributed, and some slight improvement seemed to be gained. In the month of June the patient was again in

much the same state, except that an ulcer over the sacrum was added to his other troubles. In September, during the absence of Prof. Jaccoud, the treatment was changed and strychnia was given, and soon after this a sign of improvement appeared, due probably not to the change of drug, but to the salutary influence of time, aided possibly by the previous medication. Whatever was the cause, the power of movement began to return, first, in the upper limbs and then in the lower, and at the same time the anæsthesia disappeared, and gave place to a degree of hyperæsthesia, and with these improvements the ulcer on the sacrum began to heal. The muscles were found to have preserved their electric reactions in a normal state, despite the time they had remained useless.

Vesical Calculi in the Urinary Bladder of an Hypospadias—a Surgical Curiosity.

In the *Jour. Am. Med. Ass.*, January 24, 1885, Dr. M. Schuppert, of New Orleans, reports as follows:

The subject of this interesting narrative was a musician, about forty five years old, with a congenital deformity which stamped him an hypospadias; with the urethra of the pendulous portion of the penis left open, the latter organ presented a *membrum virile cum impotentia generandi et coëundi.* That penis reminded me of an operation said still to be performed by the inhabitants of some of the islands of the South Sea, as also among the Australians and Esquimaux—people who, in regard to culture, stand probably yet at the same prehistoric footing as the so-called *neolithic period.* I say it reminded me of what these Australians call the *mica operation*, which consists in cleaving the lower wall of the urethra for the purpose of producing sterility, and which operation they perform with a stone knife, a piece of flint they sharpen, and with which they are said to perform also laparotomy, and even trepanning.

The morphological interest in our musician's case was heightened by the fact that with the urethra left open to the root of the penis from the first period of fœtal life, that membrane had grown to an extraordinarily large size and length, measuring in its relaxed condition 14.5 centimetres (near 6″) in length. The opening at the root of the penis was not larger than 8 mm. in diameter, and that opening, which corresponded with the locality of the caput gallinaginis, proved the man's misfortune. Through that opening our musician had been in the habit of playing with the cork of a wine bottle, "*pour saulager la nature,*" est modus in rebus; and as none are so daring as those who have long been accustomed to place their dependence on their own exertion—it being the distinct mark of genius, that it lights its own fire—our prestidigitator one day in thus pursuing the even tenor of the way of his Anacreontic desires, in playing a fortissime experienced on himself the truth that "what is considered happiness to-day may get misery to-morrow," and, like the pitcher that goes constantly to the well, is likely to break at last; so the cork, escaping once his fingers, vanished between wind and water to that bourne whence no traveler ever returns, except it be by the hand of the sympathizing surgeon.

It is properly said that "a rolling stone gathers no moss," but a rolling cork in a vesica urinaria may gather phosphates and become an annoying peregrinarian calculus. Hugging the delusive phantom of hope to play himself the successful accoucheur, our musician had at various times tried, by introducing wires, tape, fiddle strings, etc., to get hold once more of the fugitive stopper, but frustraneously. He finally discovered how truly Rabelais had said, that "the attempt to run a wind-mill by the wind squeezed out of a dead ass, be a futile enterprise of an impracticable genius," and he came to the conclusion that a good musician might turn out a very poor surgeon. He felt some embarrassment to acknowledge his foolishness. But as the man who tells one lie will have to tell a dozen more to sustain the first, he was soon caught in his own net, and forced to make a full confession.

The operation was decided upon. When the patient was under the full influence of chloroform, I succeeded in an easy manner in extracting, with a calculus spoon, entered through the natural opening, the incrustated cork. But, from its size, no doubt could exist that another and even a larger piece was still behind. Entering the instrument again, that piece was soon grasped and brought to the entrance of the opening. But it was impossible to extract it in that manner; a forceps and the percuteur were both tried, but with no better result. The cork could not be compressed nor crushed; therefore the opening was enlarged with the long knife of Vacca Berlinghieri, the incision being made towards the neck of the bladder, when, with a forceps, the other piece came away quite easily. Both pieces were thickly incrustated. No doubt, by his efforts to get the cork out, the musician, in using the wire, had cut the soft cork in two. The operation was not followed by any untoward symptom after the bladder had been well irrigated and washed out. The patient was not even confined to bed for a single day. Who was happier than than our fiddler, when once more he held his dear and unlucky cork in his hands? A proposition of doing away with the tempting opening in restoring a normal channel, he nevertheless refused. I never saw him again.

Regularly Intermittent Albuminuria.

Quoting from the *Arch. f. Klin. Med.*, the *Medical Chronicle* tells us that Falkenheim records a case of intermittent albuminuria occurring in a man, æt. fifty, of temperate habits, and with no syphilitic history. His illness began at the age of forty-five, with indefinite stomach troubles, followed after two years by a tumor under the left ribs, which continued to grow. A year later he found it impossible to work on account of shortness of breath and distension of the abdomen. For a year before admission he had a feeling of fullness and oppression in the right hypochondrium. State on admission: slight icterus of the sclerotic; elevation of the diaphragm, displacing the heart; the abdbmen considerably elevated, the free border of the ribs strongly bent out; the spleen greatly enlarged; the liver also enlarged; the blood normal; the urine normal. The patient complained of great weakness, of a sensation of

fullness and weight in the abdomen, and of susceptibility to digestive troubles. The diagnosis was cirrhosis.

On admission the urine was normal. That passed during the following night contained albumen. The urine passed next day was found at the physician's visit not to contain albumen. This awakened attention, and, finding that the order of events repeated itself, Falkenheim made a close investigation into the cause of the occurrence, the result of which may be briefly given thus.

It was discovered in the first instance that the presence of albumen was dependent in reality, not on whether the urine was passed during the night or during the day, but on the position of the patient, whether he was lying down or not.

The various recumbent positions were then tried, and after careful observation the following conclusions were arrived at. With the patient lying on the right side or on the back there were only traces of albumen; if he lay half to the left or quite on the left side, much albumen; if on the forepart of the left side, very little; if on the belly or on the forepart of the right side, none.

These results were constant, and suggested a mechanical cause. This cause might be pressure on the left renal vein, which crosses the aorta between the first and second ribs to join the vena cava. Such pressure was not unlikely to occur from the sinking of the forepart of the spleen towards the left, and from the direct pressure on the spleen from lying on the left side.

Now, were this so, and did the pressure occur on the renal vein after its junction with the left spermatic vein, we should be not unlikely to obtain some swelling of the pampiniform plexus on the left side, which was accordingly distinctly noticeable. No swelling of the scrotal region was observed when the patient lay on the right side. The author therefore considers that the intermittent albuminuria was due to pressure on the renal vein. He also determined on several occasions the time which elapsed between assuming the position implying compression of the vein and the appearance of albumen. One of these observations is given. Albumen was present after ten minutes and abundant after twelve. The urine examined was obtained by means of a catheter.

Gastroenterostomy.

The *Med. News*, January 24, 1885, says:

In the *Correspondenzenblatt für Schweizer Aerzte*, for November 1, 1884, may be found the report of what must be regarded as the most remarkable case of gastric surgery that has as yet been recorded. On the 15th of July, 1883, Prof. Socin resected the carcinomatous pylorus of a woman, forty-three years of age, who subsequently enjoyed excellent health for upwards of eight months. At the expiration of this time, she began to be troubled with symptoms of dyspepsia; and on the 23d of May, 1884, a recurrent tumor, adherent to the abdominal wall, the pancreas, and the liver, was discovered. On the 5th of June, gastroenterostomy was practiced; the patient made a rapid recovery, and at the end of four months her digestion was excellent, she had slightly gained in weight, and the tumor had only increased in volume.

The establishment of an opening between the jejunum and the stomach, to insure the passage of food into the intestinal canal, and thereby prevent death from starvation in cases in which pylorectomy is contraindicated, has been resorted to at least twelve times for carcinoma of pylorus, the operators having been Wölfler and Lauenstein, each in two cases, and Billroth, Rydygier, Kocher, Monastyrski, Lücke, Courvoisier, Rausohoff, and Socin, each in one case. Of the twelve, nine, or seventy-five per cent., died; and three, or twenty-five per cent., recovered. Of the recoveries, two were living at the end of four months, and one at the expiration of six months. Rydygier, in March, 1884, had a success in a case of ulcer of the duodenum.

These results indicate that gastroenterostomy is as deadly an operation for carcinoma as is pylorectomy. It has, however, succeeded in prolonging life in one case out of every four, so that the patient may be given the chance if it be desired.

Among the more recent attempts to establish a communication between the stomach and the intestine, is the novel case of Dr. Conner, of Cincinnati, which is recorded in the *Medical News* for November 22, 1884. The entire stomach was extirpated "with the hope of attaching the cardiac end to some portion of the intestinal tract, so that the fluids poured out in the upper part of the small intestine might flow down to meet the food, and cause digestion in the part of the intestine where they come together." As the patient died upon the table, the operation was not completed. However feasible it may be, so far as surgical procedures are concerned, we fail to see that, in the event of recovery, it could be of any service, from the fact of the supply of the gastric juice being entirely cut off. Hence, we trust that the operation will not find imitators.

Absorbent Cotton as an Electrode Covering—A Suggestion in Electro-Therapeutics.

Dr. G. Betton Massey thus writes in the *Med. News*, February 7, 1885:

To practical workers in medical electricity the covering of the metal electrodes used to convey currents to subdermal tissues is a matter of more than apparent importance. The object of this covering is the maintenance of water, or a saline solution, in a position to conduct the current painlessly from the metal surface through the epidermis (which is a very poor conductor in a dry condition) to the moister tissues below. This covering should be thin, yet retentive of a sufficient supply of liquid. It should be soft, cheap, and readily cleansed or renewed. Sponge has been the favorite of late, owing to the superior softness and water-absorbing power possessed by it in contrast with wash-leather or muslin. It has the disadvantage, however, of excessive humidity—often drenching contiguous clothing; added thickness, leading to increased resistance and alterations of resistance while *in situ*, when the pressure is slightly changed; irregularity of surface, causing pain at first instant of contact, and a subsequent unequal distribution of current through the area covered by the electrode. In

addition, these sponges, unless frequently removed, cleansed, and carefully re-sewn, soon become unfit for use from an accumulation of verdigris, saline deposits, epidermic scales, and sebaceous matter. Their instrumentality in the transference of disease from patient to patient can readily be conceived; and, unfortunately, instances of this unpardonable accident are on record.

With these disadvantages in mind, the substitution of absorbent cotton as a covering recently occurred to me. A trial demonstrated its value, and I immediately removed the sponges from the greater number of my electrodes. It is applied to the brass disk in a few seconds, after the manner of gynæcologists when covering their uterine applicators; a pinch of sufficient size, and with the proper smoothness of fibre, is laid on the face of the disk and the edges pressed over and twisted around the shank by a twirling motion of the electrode. In a moment it is ready for use; and the covering may be rejected immediately after the application. But little practice is required to learn how much cotton to use, and to obtain a smooth covering on any but the very largest disks. The many advantages of this material for this purpose are too apparent to require mention, not the least being its preëminent smoothness, softness, and neatness.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The bound volume of *The Analectic* for 1884 presents a handsome appearance, and is replete with carefully-culled information on all branches of medical science. *The Analectic* is edited by Walter S. Wells, M. D., and published monthly by G. P. Putnam's Sons, New York city.

——In a reprint entitled "Massage: the Latest Handmaid to Medicine," Dr. Benjamin Lee, of this city, gives a brief and well-prepared sketch of the application of this procedure in therapeutics. We note that he quotes erroneously the famous words of Webster, "Action, divine, God-like action," for which the doctor substitutes "motion."

——The Messrs. Lloyd, of Cincinnati, send a reprint of an article by Dr. Roberts Bartholow on Hydrastis, giving some physiological and clinical effects of this drug. He thinks it a useful remedy.

——The Pennsylvania Hospital has issued a handsomely printed pamphlet containing addresses by Dr. Thomas G. Morton and John B. Garrett on the unveiling of West's picture, Christ Healing the Sick. This celebrated work of art was presented by the great painter himself to the hospital, and has recently been restored.

——The ninth "Toner Lecture" was delivered by Dr. C. K. Mills, his subject being "Mental Overwork and Premature Disease among Public and Professional Men." It now has appeared in in a neat form as a reprint, and is well deserving of careful perusal.

——The "Address before the College of Physicians of Philadelphia," by Dr. J. M. Da Costa, delivered in February, 1885, and lately published is separate form, is one of those polished and appropriate compositions which the distinguished Professor knows so well how to prepare.

——An essay by Dr. George Hamilton, of this city, on the question "Was the act of the British Parliament in restricting vivisection inconsiderate and unnecessary?" will interest all who would keep abreast of what seems to us this rather unimportant controversy.

——Dr. P. D. Keyser, of this city, in a reprint before us "calls a halt" in the indiscriminate use of cocaine in ophthalmic surgery. He warns the profession that it is by no means innocuous. He closes with the advisory words:

"As a local anæsthetic in the removal of foreign bodies from the cornea, strabismus, and such external operations, I know of nothing equal to it. But I would be very careful in its free use where the cornea is opened and the iris incised.

"While writing this article I learned of two other cases of panophthalmitis occurring after its use, but have not had time to get the particulars."

——An elaborate paper by Dr. N. Senn, of Milwaukee, "On Cicatrization in Blood-vessels after Ligature," has been reprinted from the *Trans. of the Amer. Surgical Association*. It is a thorough examination of the process.

——The proceedings of the Kentucky State Medical Society form a pamphlet of thirty-five pages, with the usual minutes.

——Some of the preventives to the accomplishment of marriage are set forth by Dr. C. H. von Klein, of Dayton, Ohio, in their application to the law of divorce. The subject is one of great interest, and his views are deserving of close attention.

——The "Transactions of the Sei I Kwai" come to us printed, for the most part, in excellent Japanese; but as we have not thoroughly perused this portion of the book, we shall reserve our opinion about it. The Sei I Kwai is the society for the advancement of medical science in Japan, and it publishes its transactions in monthly parts at Tokio for the reasonable price of 1.50 *yen* a year.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Quarterly Compendium of Med. Science, -	**2.50**
Reporter and Compendium. - - - - -	**6.00**
Physician's Daily Pocket Record, - -	**1.50**
Reporter and Pocket Record, - - - -	**6.25**
Reporter, Comp. and Pocket Record, - -	**7.00**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M. D.,
115 South Seventh Street,
PHILADELPHIA, PA.

THE

QUARTERLY COMPENDIUM

OF

MEDICAL SCIENCE.

The attention of our readers is especially called at this season to the ***QUARTERLY COMPENDIUM,*** which we publish.

It is, in fact, a supplement to the ***REPORTER,*** being made up of articles which have not appeared in the weekly, but yet are of value and interest to the physician.

It contains about 150 pages of reading matter in each number, and the whole four numbers, embracing 600 pages of choice material, will be sent to paid-up subscribers to the ***REPORTER*** for the very moderate price of

ONE DOLLAR,

in advance, for the year.

Address

DR. D. G. BRINTON,
115 South Seventh Street,
PHILADELPHIA.

THE PHILADELPHIA COUNTY MEDICAL SOCIETY AND QUACKS.

It has been for a long time the reproach of the profession in this country, and especially of our own city, that diplomas could be very easily obtained. Not only this, but that men could practice, or rather *did* and *do* practice medicine, or to be more exact, undertake to cure disease, without proper legal qualification therefor.

Of course, common sense will tell us that many of our most thoroughly *legalized* physicians are comparatively incompetent to treat and *combat* with disease, but this is not an argument in favor of allowing thoroughly unqualified men to prey upon the public. The Philadelphia County Medical Society has realized this fact, and its newly-elected President, Dr. R. J. Levis, has appointed on the "Committee on Hygiene and the Relations of the Profession to the Public" nine men who are determined to ferret out all men who may be practicing medicine illegally in this city. This committee inaugurated its work by arranging for the selection of a legal adviser to the committee, who was found in the person of Mr. Lincoln Eyre (a most capable member of the Philadelphia bar), who will advise the committee as to the proper cases to be brought to the attention of the District Attorney, who, as the legal officer of the county, will be called upon to conduct the prosecution of any one who may be found to be practicing medicine illegally.

It has also been provided that this committee shall arrange for a series of popular lectures on Hygiene. The first lecture has been given by Dr. E. O. Shakespeare, his subject being "Cholera;" it was beautifully illustrated, and was listened to by an audience that completely filled not only the *seats* but *all* the *standing* room of the hall. The second lecture will be delivered by Colonel Ludlow, the Chief Engineer of the Water Department, on Monday evening, March 30th. This course of lectures promises to do much towards fostering the already growing interest in hygiene.

To ferret out quacks, detectives will be employed whenever necessary, and the strong arm of the law will be invoked—and invoked most

liberally—to relieve our city of the stigma that hangs over it.

It will be a thankless task. The committees of the Philadelphia County Medical Society have hitherto, as a rule, been a "Rip Van Winkle set," as are so many in our good old town—but it is a praiseworthy one, and it deserves encouragement and support from every right-minded person. We have laws—unprogressive as our State is—we have laws regulating the practice of medicine, and providing certain obligations for those who desire to have the authority to "*kill or cure;*" and it is the purpose of this committee to bring to the attention of the proper legal officer the names of all men or women who may not have complied with these requirements, and not only to ferret them out, but also to urge upon, assist, and, by all legitimate means, force the conviction of such miscreants. We have too many *good* doctors; we have an overcrowded profession, which, however, is always ready to welcome into its ranks any one who may desire to practice medicine and will *properly* qualify himself, because they *cannot* and *do not* desire to turn the cold shoulder toward such; but the profession *does* say, and says strongly, in tones that are unmistakably meant to be heard and heeded, and in time will be obeyed, that as custodians, to a certain extent, of the public wealth, through the public health, quacks and charlatans, those who have no right to practice medicine, *must* be suppressed.

There is a young *abortionist* in jail in this city now; he is only eighteen years of age, was a bartender, and yet (think of the terrible nature of this *boy's* avocation) he went from town to town, and even from State to State, practicing his criminal and disgusting trade, until, fortunately, the law called a halt upon his nefarious practices.

Such cases as those mentioned in this editorial are by no means rare; every large city and many small towns will furnish their quota of medical parasites living on the ignorance, credulity, or gullibility of our people. Let us weed them out; let us give every qualified man a chance; let us do all that is right and fair towards our professional brethren; but *do not* let us degrade our noble and ancient profession by allowing BAR-TENDERS and CLAIRVOYANTS to prey upon the unsuspecting people of our neighborhood.

AN OPINION ABOUT A STATE BOARD OF HEALTH.

That a number of States of the Union, among others Pennsylvania, have not yet created a State Board of Health, is nothing short of discreditable to the civilization of the age and the pretended education of the people. Did these latter have any just conception of the magnitude of the interests involved, they would lose not a day in insisting that the Legislature of the State should at once pass the proper bills creating such a Board.

Proof of this is, that where they have been formed they are rapidly growing in public estimation. The value of their labor is appreciated, and will continue to be.

This is illustrated in the recently-published biennial message of Governor John M. Hamilton, of Illinois. He says:

"The State Board of Health, which was in its inception very difficult to establish by legislative enactment, has steadily grown in usefulness and popular favor, until now it is one of the most important bureaus of the State government. By reason of the able management of its members, and especially of its secretary, the medical profession of the State has been much elevated and improved. Incompetent beginners have been prevented from practicing. The grade of medical education required for practice has been raised to a respectable and safe standard, while mountebanks and quacks have been driven from the practice of their wiles and deceptions on the people of this State. The health of the citizens and their protection from inroads of contagious and epidemic diseases have been faithfully and carefully watched. Rules for sanitary care and regulation and instruction as to prevention and cure of prevalent and especially dangerous diseases, have also been so successfully published and promulgated that it is believed thousands of lives have been saved."

In the face of intelligent experience of that kind, why is it that such lethargy on the subject continues? Largely, we believe, because physicians themselves do not urge the advantages of such State organizations on the community. Too many speak indifferently on the subject, or even disparagingly. With such testimony from an impartial source, this indifference ought to cease.

Notes and Comments.

Large Pelvic Abscess of Obscure Origin, Opened Per Rectum.

Dr. Cottenham Farmer thus writes in the *Brit. Med. Jour.*, January 17, 1885:

In April, 1884, Mr. R. C., aged twenty, articled clerk, born in New Zealand, thus described his first symptoms:

"In the evening of April 3, a pain began in my stomach, gradually increasing in severity until I vomited, and the bowels acted; not having done so for two days. I was drawn together with pain, and felt cold. The pain lasted several hours, and left me sore and prostrate. Although the bowels had acted fully, there still remained a fullness about the left bowel, accompanied with pain. On the 4th instant I used an enema, but without any effect; soon after a severe pain commenced in the bowels, causing me to go to stool, but without results further than the passing of some watery-looking, slimy stuff after severe straining, and the pain continued, without ceasing, until the evening of the 6th instant, when I called in the medical man."

On my seeing him, he had abdominal pain, but no marked tenderness. His temperature was 102°; pulse 88; he had tenesmus. As he had been exposed whilst fishing, I considered it a slight febricula, and ordered salines and Dover's powder three or four times a day, which, as he said, kept him quite easy. This continued until April 13, with usually a subnormal evening temperature. He had now some pain when passing urine. In the evening I noticed suprapubic dullness, and, thinking the bladder was distended, passing a catheter, but drew off only a small amount of urine.

On the 14th, finding the same dullness after passing a catheter, I examined the rectum, and there found a large rounded fluctuating tumor, occupying the position of a distended bladder, and flattening the rectum. This I aspirated, and drew off about a pint of the most foul-smelling pus. It had reaccumulated on the 16th, when I made a small incision. A free escape took place, and small quantities continued to pass daily after each action of the bowels.

On the evening of the 19th, however, pain commenced again, with shivering and rise of temperature. I gave him quinine in large doses, and diagnosed a secondary abscess higher up. On the 21st, Dr. Page, of Newcastle, saw him with me, and, after a most careful examination, suggested the probability of some disease of the pelvic bones (os pubis or ischium). We agreed to thoroughly drain and wash out the abscess. This was done on the 22d, when I introduced a winged catheter, and injected a lotion of carbolic acid, and this was continued morning and evening, until June 17, when the cavity had almost closed, and the discharge had ceased, and the catheter was withdrawn. For some time, he had abdominal pains and patches of dullness, and a small amount of ascites, with enlargement of the right inguinal glands. In August he went to the seaside for a month, and is at present well, has regained weight, and is without dullness or pain of any kind, except under circumstances of extreme fatigue.

I think such cases are rare, and perhaps worthy of record, and I should be glad to hear from other more experienced surgeons of similar cases, and the probable result if left entirely to nature's treatment; also with regard to pelvic or vertebral abscesses forming in such a locality.

Purulent Ophthalmia in Infants.

Mr. Cowell's paper on this subject before the Harveian Society of London (Feb. 5, 1885), had for its special aim to show that the large amount of blindness due to this disease could be avoided if (1) the people could be instructed as to its dangers, and if (2) medical men universally recognised the futility of only temporizing measures. This object could best be attained by unremittingly, and by every means, endeavoring to diffuse a knowledge of the disease and of its dangers, through the dispensaries, the clubs, the lying-in institutions, and the visitors of the sick poor. Prophylaxis was the next important duty. In respect of treatment, the first essential was that no time should be lost. The indications were (1) to remove the conjunctival discharge as rapidly as it formed, (2) to relieve tension, (3) to watch and treat the complications. In addition to the usual rules of treatment, Mr. Cowell recommended that the affected eyes should be cleansed every quarter of an hour with weak antiseptic lotion, and the conjunctivæ painted with solution of nitrate of silver (four to six grains to the ounce) daily in severe cases, twice or thrice a week in mild ones, the free solution being washed away with antiseptic lotion. When there was much discharge, alum or boracic acid might be added to the lotion. The *cul-de-sac* under the upper eyelid required careful washing out. The ablutions might be less frequent during sleep, and gradually diminished as the discharge lessened. Where severe chemosis occurred, early scarification was necessary.

Mr. Juler inquired whether severe cases could be diagnosed early from milder ones. He quoted some investigations of Dr. Widmark (*Revue Générale d' Ophthalmologie*, September, 1884), in which twenty-two cases of purulent conjunctivitis had been examined (four adults and eighteen infants). Bacteria, described as gonococci, were found in the majority in the fluid in the pus-cells, and in the epithelial cells. In the adults, he discovered gonococci in the urethral secretion; and in the infantile cases, in the urethral discharge of the mother. The gonococcus was absent in six of the infantile cases, which ran a mild course. The antiseptic lotion used for the ablutions should be weak (0.5 per cent. carbolic or boracic acid). The conjunctivæ, if severely swollen, should be freely scarified; and, if eversion of the upper lid were impossible, the outer canthus should be divided.

Mr. H. Power said that, when due to gonorrhœa, cases were likely to do badly unless they received skilled treatment early. On a wide average, cases, if seen in the first week, would recover; if in the second week, they would run a dangerous course; if in the third week, they were hopeless.

Icterus Produced in a Few Hours by Nervous Irritation.

What might be called the psychological causation of jaundice has been already discussed in our pages; hence, the following case, which we note in the *Jour. Am. Med. Ass.*, March 7, 1885, is of interest. We learn that Dr. H. Rendu (*France Médicale Jour. de Med. et de Chir.*) relates the case of a woman twenty-five years of age, who had been treated in his hospital service for puerperal peritonitis. During her convalescence, while her general condition appeared to be good, she was affected with retention of urine. The student who attempted to use the catheter made several ineffectual efforts, but was obliged to desist on account of a sort of nervous crisis which his manipulations produced. Three-quarters of an hour later, when he returned to the ward, he was astonished at seeing his patient manifestly jaundiced (she had a very clear skin previously). As he was about to attempt catheterism again, the patient, still very nervous, urinated spontaneously—the urine being of a deep brown color, and evidently containing biliary pigment. This occurred at 11:30 a. m. At 1 p. m., the yellow color was marked not only in the conjunctivæ, but also all over the skin, being most pronounced on the abdomen and trunk, and a little less so on the extremities.

On the following day the jaundiced appearance was as decided as during the most intense and prolonged cases of hepatic colic. The urine looked like brown beer, and gave a green color on the addition of nitric acid. The stools were of the greyish, clayey character, as when deprived of bile. The pulse was normal—no prurigo, no nervous trouble, no hemorrhagic tendency, tongue clear, marked thirst, no want of appetite; ate but little; no pain over nor enlargement of liver; no abnormal sensibility at the epigastrium.

For two days the icterus retained its maximum of intensity. The third day it commenced to decline, and the stools took on a little color, the urine remaining dark. The fourth day gave no trace of the jaundice externally, only the urine was a little dark in color and responded to the nitric acid test. On the fifth day there was no evidence whatever of the recurrence of jaundice.

Recovery from Strangulated Hernia after Refusal of Operation.

Dr. John B. Roberts thus writes in the *Polyclinic*, January 15, 1885:

"Two or three years ago Dr. J. C. DaCosta requested me to see a man who had had left-side hernia for about four years, which was now, and had been for many months, irreducible. For two days and a half the patient had had no stool, and had been complaining of pain referable to the hernial and to the umbilical region. Dr. DaCosta had attempted taxis, but failing, had given castor oil, which was vomited without inducing an action from the rectum. An enema was ordered, and a subcutaneous injection of morphia given; after which he called me to meet him in consultation. When we saw the patient, he complained of no pain. I was not able to get any accurate history of the case from the man himself or his family, but he had a hernia the size of a black walnut, elongated horizontally, lying apparently below Poupart's ligament. I was unable to determine to my satisfaction whether it was a direct inguinal or a femoral hernia. Tonics under ether failed to reduce the hernia, and as herniotomy, though strongly urged by Dr. DaCosta and myself, was refused, opium and belladonna were administered, and ice applied to the tumor.

"I did not see the patient again, but was informed, two days later, that abdominal tenderness was somewhat more marked, though there was no pain except on pressure. No action of the bowels had occurred. When I saw the attending physician several weeks after, he said the patient had recovered without showing any further un-

favorable symptoms. The hernial tumor, of course, remained.

"In this instance the unfavorable prognosis made by me was unsustained by the history of the case. Whether strangulation of a small portion of an old hernia was relieved by the manipulative efforts made by Dr. DaCosta before my visit, or by our joint action, or whether actual strangulation never existed, I was unable to determine. The history, indefinite as it was, and the symptoms, justified resort to operation, because of the well-known danger of operative delay in strangulated hernia. In all similar cases I should still advocate exploratory incision."

Cancer of the Thyroid Body.

The *Medical Mews*, January 31, 1885, says that M. Marchand, in the *Gazette Hebdomadaire* of Dec. 26, 1884, reports a case of cancer of the thyroid body, which is interesting on account of its rarity, the peculiarity of its progress, and the symptoms to which it gave rise. The patient was a woman thirty-two years of age, without hereditary taint of any kind. She had always had a large neck. At the time when she first came under the notice of M. Marchand, a tumor of the size of a hen's egg was discovered on the right of the median line. Its appearance was first noticed six months previously. In contrast with the cases heretofore published, in which a rapid progress has been noticed, complicated with disturbances due to the compression of the œsophagus, the tumor was developed slowly, and the respiratory function alone was interfered with. Dyspnœa, at first temporary, finally, at the end of six months, became constant. Accurate examination was impossible, as pressure produced marked stenosis of the trachea.

Treatment with potassium iodide gave only temporary relief. Thyroidectomy was then decided upon in preference to tracheotomy. A longitudinal incision was made, extending to the sternal notch. The tumor thus exposed was of a reddish-white color traversed by large vessels, perfectly circumscribed, but enveloped in a fibrous tissue, from which it was difficult to isolate the vessels. Ligatures were applied above and below, and the tumor was excised between them. The trachea was found intact. The edges of the wound were united by metallic sutures and the wound rapidly healed, and the woman left the hospital in three weeks.

The tumor was very large, projecting nearly four inches, and having a circumference of nearly ten inches. Microscopical examination showed it to be cancerous. After three months, there are no signs of return, either local or general. Rose, up to 1879, only could collect three cases of thyroidectomy, all followed by death. Billroth has since had three cures—two temporary, of two years' duration, and in a third there has been no return, two years after operation.

Chloral in the Convulsions of Children.

Dr. Henry Dwight Chapin discusses, in the *American Journal of Obstetrics*, December, 1884, the relative merits of chloral and morphine in the convulsions of children. He believes that while morphia will, in many cases, control the convulsions, yet it is an extremely dangerous remedy, tending to hurry the congested brain into a fatal stupor. He strongly advocates the rectal injection of chloral. He has seen many cases, as critical as those in which the morphine was given subcutaneously, yield almost as quickly to chloral administered by the rectum, as doubtless have many others who have thus employed the latter. Some weeks ago he was called late at night to see a baby fifteen months old, who had been in a convulsion over an hour. The infant was lying in a deep stupor, with jaws tightly set, thumbs pressed into the palms, and having convulsive seizures every few minutes. He tried in vain to pry open the teeth and get down a solution of potassium bromide. An enema was next given, although the mother positively stated that no indigestible substance had been taken. No fecal matter came away, and the water remained in the bowel; as no time was to be lost in waiting for it to be expelled, he at once injected five grains of chloral in solution into the rectum. The convulsive movements soon became less violent, and with longer intervals between. The chloral was repeated several times, and the convulsions soon stopped entirely. The stupor remained, but in several hours it was gradually replaced by a natural sleep, and the next morning the baby was quite bright, although looking pale. In this case he could find no cause for the convulsions, but thinks if sufficient morphine had been given to control them, the stupor would have ended fatally.

Atropia in Severe Electric Shock.

As Dr. Wm. G. Eggleston says in the *Med. Record* (January 31, 1885), our text-books have very little to say, or in truth nothing, about the treatment of severe electric shock. Hence his observations possess a peculiar interest. The predominating symptoms in the three cases which

he records are those of extreme cardiac and respiratory depression. He used atropia hypodermically in doses of $\frac{1}{100}$ to $\frac{1}{80}$ of a grain with most excellent results. We will transcribe one of his cases as a fair sample of all of them:

Case 2. C. K——, twenty-six years of age, received a shock from a dynamo-electric machine on October 8, 1883. He walked about ten steps, said that his arms and hands felt dead, and then became unconscious. When first seen, within ten minutes after the accident, the hands and fingers were strongly flexed; the head was thrown back; the pupils widely dilated and insensible to light; respiration jerky and gasping, shallow and very slow; the pulse slow and irregular, though not very feeble; and the patient almost entirely unconscious, but sometimes writhing as though in agony. At times, when the head would be thrown back farther than usual, the anterior portion of the neck was markedly bulged and tense. At 8.20 p. m., fifteen minutes after the patient was first seen, one-hundredth grain of sulphate of atropia was given hypodermatically; within twenty minutes the respirations and pulse became more frequent and more regular, and the patient soon so far regained consciousness that brandy-and-water and spir. mindereri were administered every fifteen minutes. The respirations [and pulse became irregular again at 9:55, and one-eightieth grain of atropia was injected, with improvement in twenty minutes. Though not entirely conscious, he was able to swallow the brandy and ammonia, which were given every fifteen or twenty minutes. He now steadily improved, until at 12 o'clock he sat up and was carried home. Beyond a slight weakness and a "curious feeling about the head," there were no unpleasant after-results.

Inhalation of Oxygen and Ozone.

In the laboratory of Prof. Dogiel, in Kasan, a series of investigations have recently been made to determine the effect of the inhalation of oxygen and ozone. They have been published by Dr. Filipow in Pflüger's Archiv. xxxiv., p. 335.

The inhalation of oxygen gave no result whatever. If it has any effect, it is not greater than that of pure country or sea air. According to the experiments, no good can be expected from the inhalation of pure oxygen in cases of poisoning by chloroform or carbonic oxide. Ozone, when administered undiluted, causes irritation of the upper air-passages; while diluted it has a slightly depressing effect, and seems to incline people to sleep. Its employment in the human being is therefore contra-indicated if undiluted, and diluted it is without effect.

Dr. C. Binz, who first pronounced ozone a hypnotic, as the MEDICAL AND SURGICAL REPORTER mentioned at the time, criticises F.'s article in the *Berl. Klin. Wochensch.*, 1884, No. 70. He says that individuals, to be brought under the hypnotic influence of ozone, have to be in the recumbent position, and must not be persons whose air-passages become irritated under its use, as the remedy seems to exert no hypnotic action in such cases. B. finally recommends ozone in irritable conditions of the brain and spinal cord, and advises the continuance of the inhalation for a period of four weeks or longer, to be daily administered for about half an hour. We generally notice, when we live in summer in the country, that we become very sleepy early in the evening; and as at that time the air in the country is rich in ozone, the effect mentioned may be explained by the hypnotic influence of the gas, and would also be an evidence of it.

Caffeine in Bright's Disease.

The medicinal treatment of this disease is so unsatisfactory that we oftentimes feel inclined to grasp at straws; and while caffeine may be only like grasping a straw to save a drowning patient, yet we deem it well to report what Dr. Alfred S. Gubb says in the *Lancet*, February 28, 1885:

"I have had a case of sub-acute Bright's disease (following presumably on an acute attack) under my care for some two months, with scanty, highly albuminous urine, and gradually increasing ascites and œdema of the lower part of the body and lower limbs. The only treatment which had benefited the patient in the least was the milk diet; but, in spite of a temporary improvement on this account, symptoms of approaching uræmia, and the inefficacy of any medicinal treatment, or hot-air baths, etc., rendered the case an anxious one. I then tried caffeine in the two forms supplied by Messrs. Burroughs, Wellcome & Co. for use at this hospital. First the effervescent citrate of caffeine, an elegant and agreeable preparation, but which only contains a grain to a drachm; and is therefore hardly as convenient as the Wyeth's tablets, each of which contains a grain; being readily soluble, they constitute a very convenient method of administration. The result of three or four days' treatment at the rate of fifteen grains a day, in three doses, was to increase the flow of urine from half a pint to between three and four pints of clear urine, though still slightly albuminous.

The epigastric and lumbar pains disappeared, together with the cerebral and visual troubles, and the condition of the patient has uninterruptedly improved ever since, and she has left the hospital quite convalescent."

[Labor Complicated by Vaginal Hernia.

Before the Harveian Society of London (*Med. Times*, February 28, 1885,) the notes of this case were read by Mr. W. H. Evans. The tumor when first discovered was of small size, and situated in Douglas's pouch. It gradually increased, and fluctuation was obtained. When seen in consultation by Mr. Bryant, it had so far enlarged as to allow percussion to be practiced when the labia were separated; the resonant note obtained left no further doubt as to its nature. Labor occurred at full term, and much anxiety was occasioned by the protrusion of the tumor at each successive pain. Taking advantage of an interval of rest, Mr. Evans was able to reduce the hernia, and rapidly to bring the labor to a satisfactory termination. The patient did well.

Dr. Alderson mentioned the case of one of his patients in which an eminent obstetric physician, since then deceased, had, in consultation with him, diagnosed hernia in Douglas's pouch. The lady, then four months pregnant, was recommended to spend three months in bed. After delivery, which took place without further complication, the swelling was discovered to be not hernial, but, as Dr. Alderson originally believed, cystic. It was punctured, and sebaceous matter escaped.

Mr. Power inquired whether there was any evidence of the tumor in Dr. Alderson's case having been a sebaceous cyst, the situation described being most unusual for such cysts.

Dr. Silcock suggested that the tumor in question might have been a congenital ovarian cyst.

Cocaine in Chronic Cystitis and Irritable Bladder.

If all that is claimed for cocaine is made good, it will truly turn out to be one of the most valuable additions that has ever been made to our materia medica. Dr. F. F. German thus writes to the *Lancet*, February 28, 1885:

I have been treating a gentleman, over sixty-eight years of age, for chronic cystitis, bladder sacculated, dependent on prostatic disease; latterly, the symptoms have been much aggravated, micturition every few minutes, with intense pain at the neck of the bladder, thick muco-purulent discharge when the bladder is washed out (twice daily with boroglyceride), and diarrhœa. Almost every remedy has been used—by mouth, injections, suppositories—all fruitlessly. A fortnight ago I injected into the bladder one-third of a grain of hydrochlorate of cocaine in four or five ounces of tepid water; it was retained for ten minutes. Next morning I was pleased to find he had been perfectly free from pain, and the diarrhœa soon ceased. I have since used it four times, the freedom from pain lasting from twenty-four to thirty hours, but the frequency of micturition and quantity of sediment remain unaltered. The last few days he has complained of similar pain along the urethra, and I intend using the gelatine bougies medicated with cocaine, as suggested by Mr. Bellamy.

Subspinous Dislocation of the Humerus.

Mr. Haslam reports the following case in the *Lancet*, January 3, 1885:

J. McC——, aged thirty-two, applied at the hospital, saying that he woke up in the middle of the night feeling pain in his right shoulder, and that this was due to some twist in bed. (It was afterwards ascertained that he had had a fit.) On examination there was found to be considerable pain about the shoulder on any attempt to move it; the arm was fixed, with the scapula flexed to an angle of 45°, slightly rotated inwards, and the axis of the bone was directed to a point just posterior to the glenoid fossa. On feeling for the head of the bone below the acromial end of the clavicle a distinct depression was felt, with hollow tension of the anterior fibres of the deltoid. On inspection posteriorly a slight swelling was noticed just below the junction of the spine of the scapula with the acromion process, and on manipulation this was found to be due to the upper end of the humerus resting on the dorsum of the bone. No reliable measurements could be taken, as he had sustained an injury to the elbow when a boy which had totally disarranged the bony prominences. Reduction was easily effected under anæsthetics by a movement of abduction, extension, and rotation outwards.

Warm Douching of the Head and Neck in Insomnia of Continued Fevers.

In connection with this therapeutic procedure, Dr. Arthur J. Campbell reports the following case in the *Brit. Med. Jour.*, January 24, 1885:

In 1879 I was called one night to a severe case of scarlatina in a girl aged 13 years. Her temperature was high, the pulse very quick and feeble, the tongue brown; sordes had collected

about the mouth; and there was jactitation. The rash was very dark-colored, and her condition was rendered the more serious by sleeplessness, continuing for four days. On the day following my first visit, I administered the warm douche to her head and neck, the hair having previously been shortened. Within an hour after the process, she fell into a refreshing sleep, which lasted for about twelve hours, during which time she was disturbed two or three times for the purpose of administering food. The patient was soon convalescent, and I attributed her recovery to the timely relief given by the douche.

I could give other cases illustrating the usefulness of the warm douche in certain head cases, but do not wish to encroach on valuable space.

Aseptic Silk.

From a foreign exchange we learn that Mr. H. W. Freeman, of the Royal United Hospital, Bath, (England), has been using chromic acid silk sutures in abdominal sections to bring together the abdominal parietes, also in perineorraphy and in excisions of the breast, and he claims that deep sutures may be left in the abdominal walls for three weeks, in the perineum for a fortnight, and in the breast for the same length of time, without the slightest change occurring in the texture of the silk or sepsis in the course of the suture. China twist seems to be hardened by this process, and rendered impervious to the surrounding secretions. The silk is prepared by boiling it in a two per cent. solution of chromic acid for ten minutes, and allowing it to soak for twelve hours subsequently in a one per cent. solution. A stronger solution destroys the silk and renders it brittle.

Custom Breeds Tolerance.

This is an old and unquestionably a true saying, as also is the remark that *custom* can alter *custom*. Every once in a while we hear of some remarkable case wherein custom has bred a great tolerance of the effects of narcotic drugs, but one the most striking is that reported by Dr. F. E. Image in the *Brit. Med. Jour.*, December 27, 1884, where, in answer to a query, he says that he can well remember, as a boy, an old lady, living not far from Bury, one of his father's patients, who was in the habit of taking one gallon of laudanum a week for many years. She was a small, rosy-faced, sprightly old lady, and was between 80 and 90 when she died. Besides the laudanum, she was in the habit of taking no inconsiderable quantity of gin.

Cæsarian Section—Death—Autopsy.

In the *Lancet*, January 24, 1885, we find the following report:

On December 30, 1884, Dr. Dolan performed the operation of Cæsarian section on a primipara, aged 26, a pianist, whose height was only 3 feet 11 inches. She had been in labor five hours. There was great pelvic deformity, the antero-posterior diameter being one inch and a half. Carbolized catgut was used for the uterine wound, silver wire for the abdominal walls. The child was living. The patient died in fifty-four hours.

A post-mortem examination was held seventeen hours after death. The uterine wound was found open, a large clot having been forced through it, owing to the occurrence of vomiting. There was peritonitis, which was the probable cause of death.

Porro's Operation.

From the *Lancet*, February 28, 1885, we learn that *Il Morgagni* (7th instant) reports a case of Porro's operation, successful to mother and child, which was performed at Gubbio on the 15th ult. by Dr. Lodovico Vincini. The patient, M. M——, aged forty, was a rachitic primipara, with extremely contracted pelvis. She was in the ninth month of pregnancy, and had been twelve hours in labor, when chloroform was administered. The removal of the uterus and appendages occupied fifty-five minutes. The spray was not used, but a strictly antiseptic dressing applied. The patient quickly recovered from the anæsthetic, and in twenty-four hours was in the most favorable state. This continued, and the child, a female, is also well.

CORRESPONDENCE.

Cleanliness in Labor Cases.

EDS. MED. AND SURG. REPORTER:—

In the number of the REPORTER for January 24, reference is made to an article by Dr. G. H. Balleray in the *American Journal of the Med. Sciences*, and the treatment which he suggests for labor complicated with concurrent erysipelas. Cleanliness appears to be his principal precaution.

In the lying-in department of the Vienna Algemeine Krankenhaus some 10,000 deliveries occur annually, and the elaborate precautions which are observed to prevent septic infection, together with the marked freedom from the same which has been the result, offer suggestions to the general practitioner in the treatment of all puerperal cases. The necessity of cleanliness in attending labor was long ago insisted upon. The extent to which it shall be carried is perhaps debatable. It would seem that it is quite as necessary for the general practitioner going from bed-

side to bedside, from autopsies, low fevers, etc., to the woman ready for delivery, as for the specialist or student in his ward.

Perhaps the antiseptic methods used in Vienna may be of interest and not generally known here. In Prof. Carl Braun's ward, for instance, before examining a case, or attempting delivery, the hands must

1. Be washed with soap and water, and well-scrubbed with a stiff brush, especially the finger nails.

2. They must be dipped into a five (5) per cent. solution of permanganate of potassa, and

3. Passed through the same process with a solution of from two to five per cent. of oxalic acid, which decolorizes the permanganate stain on the hands.

4 and finally, the hands are washed in a solution of carbolic acid, of a five per cent. strength, and are then ready for the vaseline and an examination.

As soon as the after-birth has been delivered the vagina is washed out, high up, with a two per cent. solution of carbolic acid at the temperature of the room. About one gallon of the solution is used, and the injection is given by means of a huge glass fountain syringe. Almost as soon as the child is born, and often before the cord is cut, its eyes are syringed out with a two per cent. solution of nitrate of silver.

A more thorough antisepsis can hardly be conceived of, and the results seem to justify the trouble, though I cannot at this moment lay my hands on the statistics of the hospital.

W. O. Stillman, M. D.
86 *South Swan street, Albany, N. Y.*

News and Miscellany.

Climate and Intellect.

Charles Dudley Warner thus writes in *Harper's Magazine* for April:

"A great deal has been said about the effect of climate upon intellect, and not much of the effect of intellect upon climate, or, to be more exact, of the power in mental activity to resist or control climatic influences. Some philosophers have held that there is an occult sympathy between mind and matter, and that a great accumulation of mind upon one point—that is to say, the direction of a strong current of desire for or against some operation of nature—would be effective. For instance, if all the people in a wide district suffering under drought should unite in a common longing, a sincere mental struggling, for rain, that nature would feel the subtle influence through all its being, and rain would come. Unfortunately the experiment has never been tried, for common consent at any moment never has been attained—there is always somebody who has hay out.

"But this at least we can say, that it is safer to have the desire of the general mind in the right direction. Now two of the vulgar notions of this latitude are that we need 'bracing up,' and that snow is a useful product—consequently that the more severe cold weather we have, and the more snow, the better off we are. And people go on believing this to their deaths every year. As to snow, there is a sentimental notion of its beauty as well as of its utility, and a good deal can be said for it from an artistic point of view. But we are not placed in this stern world merely to indulge our sensuousness. We are put here to make the most of our powers, in view of a hereafter; and long life is a duty, besides being, in the Old Testament view, a reward of virtue. It is probably necessary to have snow at the poles in order to keep the poles cool, and insure a proper circulation and change of air round the globe; just as it is necessary to keep the equator so hot that it is as unpleasant to sit on it as on a kitchen stove. Snow, indeed, might do little harm in a land where the sun never shone. But in this region, where the sun does shine, where half the winter days are clear, the only effect of the presence of snow is to fill the atmosphere with chilling moisture, lung fever, pneumonia, and that sort of thing. The pleasanter the weather, the more sunshine we have; with snow on the ground, the worse is our condition. And yet it is vain to argue this with the people. They are wedded to traditional ideas and full of prejudice, and it seems impossible to convince them that snow in this region is harmful. It does no good to demonstrate to them that but for snow we should have a royal winter climate. On a small scale we see occasionally what it might be. There were such days in January last. The snow had disappeared, the sun shone with the light but not the heat (like an electric lamp) of May, and the air was pure, exhilarating, but not damp and grave-like. It would have been perfect but for the chill that came down from the vast snow-fields of Canada, where cold and snow are worshipped and féted all winter. And yet, after such experience, people, convinced, go back to snow. The ignorance of this scientific age is discouraging.

"The other vulgar notion is that a hand-to-hand struggle with extreme cold for months does a person good—braces him up. It must be admitted that up to a certain point any struggle or trial is invigorating to the moral and intellectual nature. But we see what too much indulgence in this leads to. The Esquimau is but little raised above the polar bear and the seal. His whole existence is just an effort to keep alive, to get blubber and skins enough to generate and keep in his body vital heat. He can think of nothing else; he has room for no other mental effort. We see the same thing in the diaries and accounts of the polar exploration fanatics. It would be the most painful reading in the world if it were not so monotonous. Each one tells exactly the same story—the story of his physical struggle to keep alive with the thermometer fifty degrees below zero. Soon the mind has no other occupation than this struggle. It almost ceases to work in any other direction. This is interesting to us at first as a study of the capacity of the human organism to resist the unrestrained attacks of nature. The experience of a person who should in this latitude, in winter, retire to an ice-house, with a hatchet and a supply of frozen hash, a whale-oil lamp, and a fur overcoat and body-bag, and sit on the ice in the darkness, and record his feelings, the gradual lowering of the vital powers, the concentration of the mind

upon the numbness of his legs, would doubtless have a physiological interest. But the second experimenter would not interest his readers so much as the first with his narrative."

The Crow and the Country Doctor.

(A Medical Fable.)

The *Edinburgh Med. Jour.*, March, 1885, tells us that "A Flock of Crows was much alarmed one day at the sight of a strange object in the midst of a field upon which they customarily fed. They at once called upon an Old Crow who practiced his profession in those parts, and who made a specialty of corns, to give his opinion about the matter. The Crow, having examined the object, shook his head, and said that it was a serious case, and that it was lucky he had been summoned so soon, though he should have been called earlier, and he would like the advice of his friend the Owl, who had had the benefit of travel abroad, and who was particularly skillful in cases which called for the Steady Use of the Eyes. He would also like to have the Frog, who was spending his summer vacation by a neighboring pool, and who had a wide reputation for his physiological knowledge, to see the case. The Crow, the Owl, and the Frog met, and having studied the object at a suitable distance, withdrew to the shade of a High Wall in order to deliberate. The Frog first opened his mouth, and observed that it was a nice Case, which reminded him of a very curious experience that he had had with a piece of Red Flannel two summers before, when he received a severe contusion upon the centre of Goltz. After telling all about this very apposite event, the Owl observed that such cases were extremely rare. He had, however, had two very much like them, the details of which he had forgotten. He then related some very humorous obstetrical stories, which much amused the Crow.

Having received these opinions, the Crow thanked his Colleagues for the valuable light they had furnished. He had himself been at first disposed to think the trouble a case of *Terror Corvorum*, or Scare-Crow; but the advice given reminded him now that the appearance in the cornfield exactly resembled a country doctor whom he occasionally met, and who, after practicing medicine for forty years, was at present trying to live on What he had Saved.

"This diagnosis was finally agreed upon, and reported to the anxious Crows outside, who were much relieved.

"MORAL.—This story shows the profit that is got from consultation, and the lucrative nature of the practice of medicine."

The Decrease of Population in France.

The Paris correspondent of the *Brit. Med. Jour.* (February 7, 1885,) writes that M. Gustave Lagneau, the well known statistician, affirms that the population has decreased in twenty-six departments of France. From 1836 to 1881, among 648,027 inhabitants, the depopulation has, on an average, reached seven per cent.; emigration to other towns is the principal cause. M. Lagneau deplores this movement of the peasants towards large centres. In large cities, particularly in Paris, there are few births in proportion to the adult population. Illegitimate births present a much larger proportion than the legitimate; and these are always accompanied by a much larger death-rate, which is about double that of the legitimate children. Emigration to distant countries or colonies, which is a fourteenth less than that from department to department, is not so disastrous; it leads to importation, and thus improves the condition of those remaining in the mother country. The emigrants also are surrounded by healthy conditions, and have families, except emigrants to Senegal and Guiana. Four departments in Normandy undergo depopulation because there are few children born. In other departments, the death-rate is greater than the birth-rate, but immigration strikes the balance. M. Lagneau says this low birth-rate may be interpreted to mean good for the individual, but future disasters for the nation. A scanty population may enjoy advantages which lessen the chances of illness and early death, but it also invites a considerable immigration. In 1881, this reached the number of 1,001,090. These invaders in time of peace live and thrive, yet the actual French population remains three or four times less than of England or Germany, and this, he fears, will lead to political inferiority.

Children of Idiots.

From the *Journal of Nervous and Mental Diseases* we learn that certain developments during the past few years in the Department of Public Charities and Correction, New York city, have raised a question of some interest. An idiot girl in one of the Randall's Island institutions was found pregnant by, Commissioner Brennan stated, one of the male idiots. Owing to the failure to make a scientific investigation, the paternity of the child and its ultimate fate remain in doubt. Berkham (*Allgemeine Zeitschrift für Psychiatrie*, Band xxxvii.) has investigated the question of the capability of microcephalic idiots to propagate their species. An imbecile man, married for some years to a healthy woman, did not have any family. A healthy man who married an idiotic wife had three children by her, two of whom are idiots. These cases support Vogt's views, that while female idiots may bear children, the males are very frequently incapable of begetting them. Marriages rarely occur between male half-cretins and healthy women, but are not uncommon between healthy men and semi-cretinous females who may happen to own a little property. Berkham has never seen the progeny arrive at maturity; if not still-born, the children usually die during childhood. The best-marked case of microcephalous idiocy on Randall's Island is sexually well developed, and there is no doubt that in his case paternity is possible. The results in the few cases cited by Berkham are supported by the researches of Monteyel, as to heredity in psychically degenerated families.

The Germinal View of Disease.

Under this title the *London Med. Press* (February 4, 1885,) says:

In this third and concluding Cantor lecture on "Climate in Relation to Health," Dr. G. V. Poore uttered a very decided opinion respecting the in-

timate dependence of phthisis on a specific bacillus. Dr. Poore described recent inquiries as proving that this disease is due to a bacillus; and that in the same connection, therefore, the affection must in future rank among infective disorders. Concerning the diffusive power of small-pox contagium, reference was made to recent experiments tending to confirm the belief that the infective particles may be carried at least to a distance of hundreds of thousands of feet from the place of local outbreak. Hay fever, also, was discussed, and the results arrived at by Mr. Blackley, showing the fever to have been caused by pollen grains carried by the atmosphere, were discussed. Epidemic influenza, potato disease, and other affections were employed in turn as illustrations of the influence of atmospheric conditions as a determining factor in the production of diseases, and at the conclusion of the lecture, a general summary of the objects held in view during their delivery was given by Dr. Poore, who said that he had endeavored in these lectures to show that many diseases which we were apt to attribute to climate were, in reality, due to our own ignorance. A knowledge of the laws of sanitation, and a strict application of those laws, has greatly improved the health of the British soldier both on home and foreign stations, and a reference to the health returns of the army was the best proof of what he had asserted with regard to climate.

Cremation in France.

From a foreign exchange we learn that cremation is gradually being introduced into France, and will soon become recognized as a legal mode of disposing of the dead. At a recent meeting of the Council of Hygiene, Prof. Brouardel, who was charged to report on the measure, proposed to establish a crematory at Père la Chaise, to be employed as a commencement for the incineration of bodies that have been used for anatomical purposes. The following is a summary of Dr. Brouardel's report on the subject: 1. As regards salubrity, the establishment of a crematory apparatus in the cemetery of Père la Chaise would present no danger. 2. Three apparatus working for eight hours would be sufficient to destroy the débris of corpses. 3. It will be necessary to establish a separate mortuary room, so as to prevent any delay in the prompt disappearance of the débris.

Women Physicians in England.

A London correspondent writes of these as follows:

Of lady doctors there are at present few in England, but the select few who have taken are already reaping a rich harvest of fees. The two most distinguished lady practitioners in London are Dr. Garrett-Anderson, a sister of the wife of the late Professor Fawcett, and Dr. Arabella Kenealy, a daughter of the late Dr. Kenealy, a brilliant advocate and finished scholar. Both of the ladies I have named enjoy large and lucrative practices, and medical men of the highest standing, who have met them in consultation, while strongly objecting to the admission of ladies into the profession, have told me that they are certainly not inferior in ability to doctors of the highest standing of like age and experience.

Cincinnati Academy of Medicine.

At a recent meeting of this Society, the following officers were elected for the ensuing year:

President—Dr. Samuel Nickles.
First Vice-President—Dr. A. E. Heighway.
Second Vice-President—Dr. Wm. Judkins.
Recording Secretary—Dr. G. A. Fackler.
Corresponding Secretary—Dr. A. G. Drury.
Treasurer—Dr. Geo. E. Jones.
Librarian—Dr. J. L. Fogel.
Trustees—Drs. J. H. Buckner, Jas. M. French and O. E. Osmond.

Items.

—*Professor:* "Mention an oxide."
Student: "Leather."
Professor: "Oxide of what?"
Student: "Oxide of beef." Exit professor.

—M. Martineau has recently treated suppurating buboes by means of the thermo-cautery, whereby an ulcer is formed which tends to heal rapidly.

—The Austrian Government has recently ordered that all phthisical hospital patients be isolated, and that such precautionary measures as necessary be adopted against the extension of the disease.

—In an original article contributed to the *Gazette Hebdomadaire des Sciences Médicales de Montpellier*, M. Grynfelt has advocated the use of injections of hydrochlorate of cocaine to facilitate catheterism.

—A Berlin medical journal says one of the specialists of New York has made five millions of dollars by his practice. The *Medical Record* asks if this paragraph is a scheme to flood New York with Berlin specialists.

—A simple disinfecting lamp is formed by burning in a common lamp a mixture of equal parts of benzine and bisulphide of carbon. Sulphurous acid vapor is abundantly given off in the burning of the mixture.

—(The doctor having advised the administration of a five per cent. solution of carbolic acid.) "Here, boy! Take this and get a twenty-five per cent. solution of carbolic acid. (*Aside.*) What is the use of being stingy in such a matter?"

—Dr. A. von Harlingen recommended at the last meeting of the American Dermatological Association, the following formula for a paste for the removal of comedones (acne); it was first suggested by Unna: Glycerine, 3 parts: vinegar, 2 parts; kaolin, 4 parts.

—A writer in the *Therapeutic Gazette* speaks highly of sulphuric ether inhalations as an expectorant in subacute or chronic bronchitis. He also recommends it to be taken in the following manner: Drop five to ten drops on a lump of sugar, and take every three or four hours.

—The *Indian Medical Gazette*, quoted by the New York *Medical Record*, says: As in England,

melanotic cancer is an ordinary cause of death in Bengal among gray and white horses. We can scarcely drive through Calcutta without seeing animals having the characteristic globular tumors beneath the skin.

—Dr. Joseph E. Warren, of Boston, suggests that the most convenient form for using muriate of cocaine in ophthalmic practice, is that of gelatine disks. He has used these disks with much satisfaction. Each one contains about half a drop of an eight per cent. solution (gr. $\frac{1}{25}$). This is a more economical method of applying the drug than that of using a solution.

—Dr. Preis (*Weekly Medical Review*) has noticed in 217 prostitutes a sort of lipomatous tumor seated between the sixth and seventh cervical vertebræ, over the spinous apophyses. These hemispherical tumors are little, firm, elastic, mobile, and not painful. He considers them to be due to pressure and friction during coitus, and has not found them in those who are not prostitutes.

—The Illinois Fish Commission, under the very able management of the present Commissioners, is proving to be a means of great satisfaction and benefit to the people of its State. Through its agency the cultivation and protection of food fishes has been greatly promoted, and interest in fish culture has been awakened, and hundreds of ponds, lakes, and streams have been stocked with fine fish.

—The *Med. Age* truly says that it will be a great relief to suffering thousands to learn, on so good authority as Dr. Piffard, that the bromide of arsenic is a cure for pimples. He recommends a one per cent. solution, of which one or two minims are to be taken in a wineglassful of water three times a day, on an empty stomach. The dose is to be diminished as the pimples begin to disappear.

—In England, recently, several children were observed to exhibit all the symptoms of poisoning by morphia. On searching the children's pockets the source of their illness was made apparent. It seems that some boys stole a seven-pound packet of cough lozenges, containing morphia, from a wholesale chemist and druggist of Chester, ate a large number of them, and distributed some among their school companions. The children all recovered.

—Three medical celebrities met together to consult at the sick-bed of General X——. After they go, the general rings for his man-servant. "Well, John, you showed those gentlemen out—what did they say?" "Ah, General, they seem to differ with each other. The big fat one said that they must have a little patience, and at the autopsy—whatever that may be—they would find out what the matter was."

—A husband separated from his wife in New Jersey on the ground of cruel treatment, because she sprinkled his underclothing with croton oil in order to keep him from going to the club and induce him to spend his evenings at home. The expedient was so successful that the wife imparted the secret to some other ladies, but the resulting endemic led to discovery of the trick.

—The Aberdeen Philosophical Society has appointed a committee to investigate the purity of the air in the schools of the city, and also to consider the best means for ventilating the schools. The chemical investigations of Mr. Jamieson, city analyst, showed that the exit air contained a very large proportion of carbonic acid; while the outside contains 4 to 5 parts of carbonic acid per 10,000 of air; the amount of carbonic acid of the exit air varied from 12 to 25 per 10,000.

—Bergh, of Copenbagen, after narrating three cases of cutaneous horns, adds, "According to Lebert, such horns give rise in 12 per cent. of cases to consecutive epithelioma. Occasionally the epithelioma is the primitive affection on which the horns develop themselves later. On account of their affinity to cancer, it is best to extirpate the horns as soon as possible, and to remove the whole skin which forms their foundation."—*Hospitals-Tidende*, 1884, No 32, vol. ii.

—Before the Sheffield Medico-Chirurgical Society (Feb. 28), Mr. Baldwin made a few remarks on the feeding of patients immediately following lying-in, suggesting full diet of meat and light wine, even on the day of confinement. He brought forward 434 consecutive cases in which this treatment had been adopted without the loss of a patient, with very little necessity for any further medicine, and with marked relief to the constipation of the first week; the women being physically stronger at the end of the usual lying-in period.

—A gardener, named Croulebois, living at Meudon, in France, has met with his death in a singular manner. He was knocking down nuts from a tree, and, in order to aim with more certainty, climbed into the tree, and kept his face uplifted. A nut suddenly fell on the right eye and crushed it. He was immediately removed to the hospital, suffering intolerable agony. Excision of the eyeball was attempted, but found to be impossible; cerebral congestion set in, and the sufferer died.

—Before the Wolverhampton Medical Society (*British Med. Jour.*, January 31, 1885), Mr. Vincent Jackson read a paper on a cheap and ready way of treating club-foot. Having given a summary of the history of the subject, which dated from 1837, he enumerated the varieties of the deformity, and divided the treatment into operative, manipulative, and mechanical. For the latter purpose he strongly recommended the use of plaster of Paris, as being quite as effectual as, and far cheaper than, the more costly special instruments.

—M. Gosselin communicated to the Académie des Sciences last autumn the result of his experiments to ascertain the action of alcohols and phenols on the circulation of frogs. He has extended this series of researches, and a few days ago stated to the Académie des Sciences that iodoform, tincture of iodine, and biniodide of mercury, have the same action as alcohols and phenols. They coagulate the blood in the capillaries, but more slowly. Oxidized water, zinc-chloride, and boric acid fail to produce the same phenomena, though they coagulate blood in contact with the air.